2014 Sustainability Report

Korea East-West Power Co.,LTD.

KOREA EAST-WEST POWER CO.,LTD.

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Overview

Purpose of Report

This report is the 8th publication of EWP's sustainability report. The purpose of this report is to provide all stakeholders with a clear understanding on EWP's economic, social and environmental efforts and performances it has made as an ethical corporate citizen.

Reporting Guidelines

This sustainability report has been prepared in accordance with Global Reporting Initiative's (GRI) G3 Sustainability Reporting Guidelines

Reporting Scope, Period and Cycle

This report outlines EWP's sustainability management activities from January 1, 2013 to December 31, 2013; and also includes some of the activities carried on in 2014. In addition, quantitative performance data for recent 3 years (from 2011 to 2013) is also adopted for the time-series trending analysis. All information of this report is about the EWP's headquarters in Seoul and its 5 business locations in South Korea. This report is published annually.

Based Unit of Data Used in the Report

Units used in this report include KRW (Korean Won), MW (capacity of facilities), GWh (amount of energy generated), TOE (amount of energy consumed), tCO_2 (amount of greenhouse gas emission), tCO_2/MWh (basic unit of greenhouse gas emission).

Additional Information

For more information, please visit EWP's website or contact the department indicated below:

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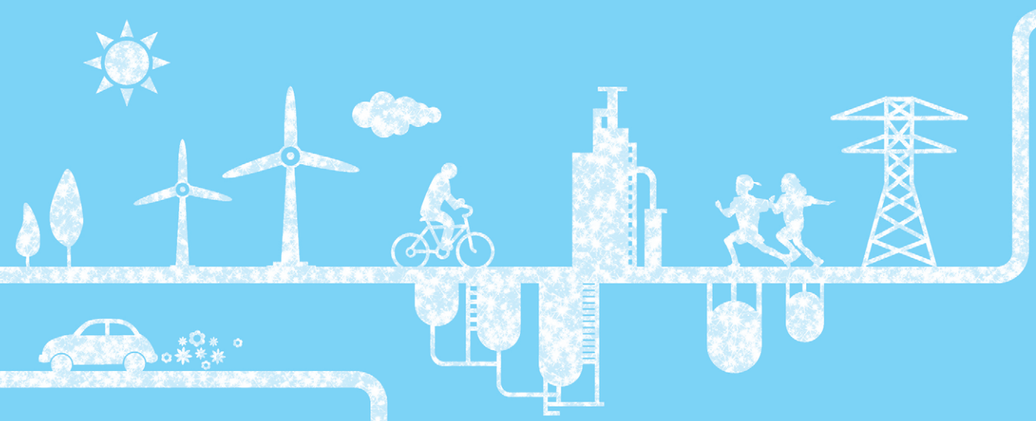
GRI G3 Guideline Application Level

Korea East-West Power Co, Ltd. (EWP) declares that its Sustainability Report has been prepared in accordance with the requirements for Level 'A' under the GRI Application Levels Guidelines.



Dear all stakeholders

I am very grateful to all people for the interest and support.

It has been 8 years ever since the first publication of the sustainability report of Korea East-West Power Co., Ltd. (EWP) in 2007. EWP has aimed for sustainable growth and has endeavored to create not only economic sector but also social and environmental sectors for entering the global enterprise. So we want to share these performances and meanings with all of you.

Through a series of enterprise-wide discussion and communication, EWP has come up with a new corporate vision "2030 Most Valuable Power Company" in 2013. This vision statement 2030 shows the willingness and aspiration of all EWP members to make the company the world class energy company which can create values in all aspects with its four core values – creation, passion and challenge, cooperation and integrity, and respect.

In addition, EWP started the gas turbine(486MW) in Ulsan Combined Cycle Power Plant to contribute to stabilizing the nation's electricity supply, while timely completing the construction of the Donghae Biomass Plant to meet the Environmental Policy. EWP also endeavored to improve performances of existing power plants and prevent sudden stops through strengthening preventive inspections.

As a member of society to live together, EWP also made constant efforts to play a leading role in establishing a basis for coexistence and cooperation with SMBs by discovering their needs and requirements, sharing technical information, promoting collaborative development projects, and cultivating new market opportunities. Also, EWP has tried to spread the culture of sharing through various social contribution projects and programs such as Multi-culture Family Aid, Job for Low Income Households and Support for Energy-Vulnerable Households.

2013 was also a meaningful year for EWP as the company's collective efforts to promote transparent corporate management culture have gained a public recognition. EWP was ranked first in the Assessment of Public Organization's Integrity, which is an annual assessment performed by Korea's Anti-Corruption & Civil Rights Commission(ACRC) aiming to root out corruption by assessing the levels of integrity and anti-corruption performances of all public sector organizations. EWP had the privilege of winning two Prime Minister Commendations in the Corruption Prevention section(organization) and Civil Rights & Interests(individual) in the at the 2014 Citizens' Shinmungo Award.

The sustainable growth of EWP is not possible without the cooperation and trust of stakeholders. Through this report, looking back on our performances in last year, we tried to reflect our lacks and share more good points for becoming a company that is loved by people and society.

We will continue making efforts to create values as a leading company in the electric power industry, and putting more strengths on the ethical management. All employees of EWP sincerely ask for your interest and advice for ensuing activities of EWP. Thank you.

President of Korea East-West Power
August 2014

Chang, Joo-Ok

We make energy for happiness.

Practicing a bigger love for better life of humans,
EWP challenges first and thinks deeper to become
a global leader.

About EWP

Company Overview
Business Areas
Governance
Sustainable Management
Risk Management
Participatory Stakeholders
Materiality Evaluation

Company Overview

:: Characteristics of Power Industry

Electricity is an essential source of energy to almost all industrial activities and the basic life of people in the modern world. Korea East West Power Co., Ltd. is a power generation company which has been spun off from KEPCO on April in 2001, in accordance with the Act on the Reorganization and Promotion of Power Industry. As of the end of 2013, EWP's total capacity is amounting to 9,342.7MW, which accounts for 10.7% of the nation's overall power generation capacity. EWP produces electricity in collaboration with private power generation company and local power distributors. It sells power to KEPCO through Korea Power Exchange, and then KEPCO sells power to general consumers through its nationwide power transmission and distribution networks.

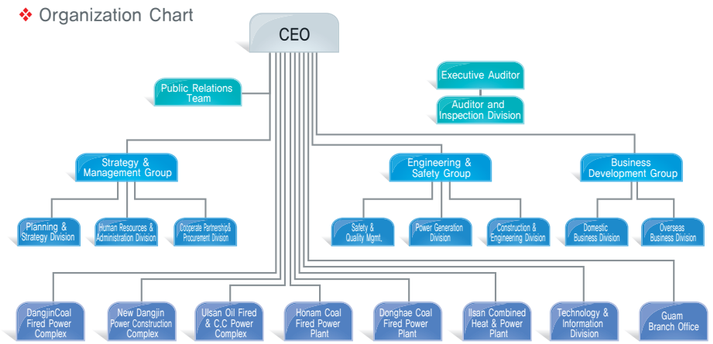
[Structure of Power Industry]

EWP			
Power generation	Power trade	Transmission and sale	Customer
6 power generation companies Private power generation companies District electric power operators	Korea Power Exchange	KEPCO District electric power operators	General customer Corporate customer

:: Pursuing Sustainable Growth

EWP has successfully completed the construction of ultra-super critical (USC) 500MW-class Dangjin Coal-Fired Power Plant Units #5 to #8, and is constructing USC 1,020MW-class Dangjin Coal-Fired Power Plant Units #9 and #10, the largest in Korea as a single facility, with a goal to complete them by 2016. The company is also constructing Ulsan Combined Cycle Power Plant unit #4(871.9MW) to expand low carbon power supply and stabilize electricity supply with the closure of Ulsan Power Plant Units #1~#3 (600MW) scheduled in 2014 according to their end of operation longevity. In addition, we are accelerating the advancement into overseas projects and development of new and renewable energy to actively respond to the changes in the environment of future power industry.

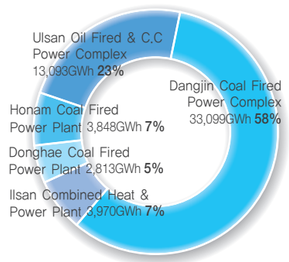
❖ Organization Chart



❖ Corporate Overview (As of Dec. 2013)

Head Office	Yeongdongdae-ro, Gangnam-gu, Seoul, Korea
Founded	April 2, 2001
Capital	3,429.1 billion(KRW)
Total Assets	7,489.1 billion(KRW)
Sales	5,429.9 billion(KRW)
Net Profit	33.3 billion(KRW)
Employees	2,231
Key Business	Power resource development, power generation, etc.
Total Power Output	56.83 billion kWh
Sales Volume	54.10 billion kWh
Stakeholders	Fully owned by KEPCO

❖ Share of power generation



Business Areas

The key business areas of EWP are thermal power generation and plant construction, overseas business and new and renewable energy business. EWP is also planning to expand the business portfolio by diversifying the business areas, to achieve a sustainable growth.

Power industry

:: New & Renewable Energy

- New business of EWP to generate growth momentum
- Promoted as a new profit source satisfying the Renewable Portfolio Standard (RPS)
- Projects status – In operation : 56.7MW (solar energy in Donghae and Dangjin, fuel cell in Ilsan, etc.)

:: Thermal Power Business

- Main business area of EWP : accounting for 99.4% of the company's overall capacity (9,286MW).

❖ Capacity of EWP's Power Generation Facility

Energy Types	Plants	Capacity(MW)
Coal (4,900)	Dangjin Coal Fired	4,000
	Honam Coal Fired	500
	Donghae Coal Fired	400
Heavy Oil (1,800)	Ulsan Oil Fired	1,800
LNG (2,586)	Ulsan C&C	1,686
	Ilsan Combined heat & Power (cogeneration)	900
New & Renewable Energy (56.7)	Small hydro	5
	Photovoltaic	7.9
	Wind	3
	Others	40.8
Total	–	9,342.7

Dangjin Coal Fired Power Complex

- Location : Dangjin, Chungcheongnam-do
- Main Fuel : Bituminous Coal (Imported)
- Capacity : 4,000MW

Ulsan Oil Fired & C.C Power Complex

- Location : Nam-gu, Ulsan
- Main Fuel : Heavy Oil, LNG
- Capacity : 1,800MW/1,686MW

Honam Coal Fired Power Plant

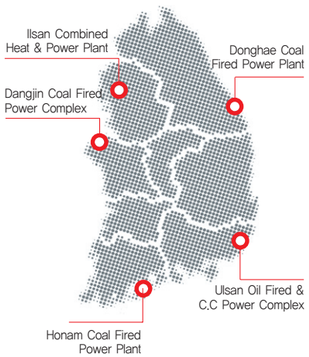
- Location : Yeosu, Jeollanam-do
- Main Fuel : Bituminous Coal (Imported)
- Capacity : 500MW

Donghae Coal Fired Power Plant

- Location : Donghae, Gangwon-do
- Main Fuel : Anthracite coal (Domestic)
- Capacity : 400MW

Ilsan Combined Heat & Power Plant

- Location : Goyang, Gyeonggi-do
- Main Fuel : LNG
- Capacity : 900MW



:: Power Plant Construction

Dangjin Plant Unit #9 and #10

- Capacity : 2,040MW(1,020MW× 2)
- Fueled by : Bituminous Coal
- Construction Period : Jun. 2011 ~ Jun. 2016

Ulsan #4 Combined Cycle Power Plant

- Capacity : 871.9MW
- Fueled by : LNG
- Construction Period : May. 2012 ~ July. 2014

Domestic New Energy Development

:: Joint Investment in Collaboration with Private Power Generation Companies

EWP has promoted a new energy development project to contribute to the nation's stable energy supply and achieve sustainable growth of the company.

Classification	Privately-invested Donghae Power Plant	Privately-invested Dangjin Power Plant
Overview	Construction of the first private-investment coal power plant in Korea	Construction of a coal power plant through a consortium with a private company
Facility Capacity	500MW×2units (2 trillion won)	500MW×2units (2 trillion won)
Construction Period	Dec. 2012~Jun. 2016	Jun. 2013~Jun. 2015
Composition of SPC	GS East Coast Power + EWP	Dongbu Construction + EWP
Location	Donghae, Gangwon, Korea	Dangjin, Chungnam, Korea

Bird Eye View of Donghae Privately-Invested Thermal Plant

:: Collective Energy Project

Overview	Daesan Collective Energy Project	Seokmun National Industrial Complex Collective Energy	Chuncheon Combined Cycle Project
Facility Capacity	140MW	38MW	500MW
Construction Period	Feb. 2014~May 2016	Apr. 2014~Dec. 2015	Unsettled (TBD)
Consortium	Daesan Combined Heat & Power + EWP	Kyungdong + Kolon Global + EWP	Posco E&C + KEPID + EWP
Location	Daesan-eup, Seosan, Chungnam, Korea	Seongmun-myeon, Dangjin,Chungnam, Korea	Chuncheon, Gangwon, Korea

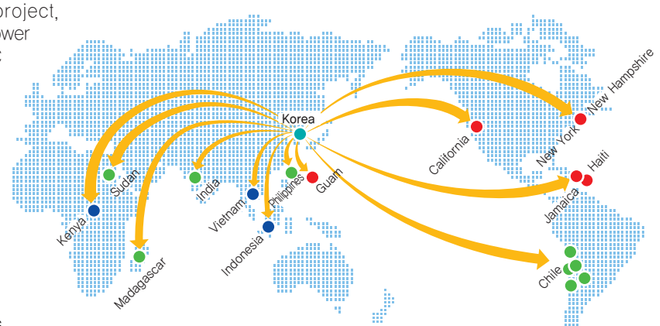
Overseas Projects

:: Advancement into Overseas Projects

- A new growth engine for leaping forward to be a world-class energy company
- Various projects including construction of overseas power plants and O&M
- Major Achievements
  - Operation projects : US EWP RC project, Jamaican Power project (JPS), Haiti E-Power project, Guam Cabras #3, #4 PMC project, etc.
  - Development projects : Indonesia Kalsel 1 Coal-Fired Power Plant project, etc.

:: Status of Overseas Business Development

- Completed : 9 projects in 5 countries
- In operation : 5 projects in 4 countries
- Under development : 3 projects in 3 countries



Governance

EWP has enhanced the transparency of its corporate governance and decision-making processes by strengthening the operating system of the BOD and encouraging the participation of non-executive directors in the managerial activities.

:: Composition of the Stake-Holders and Capital

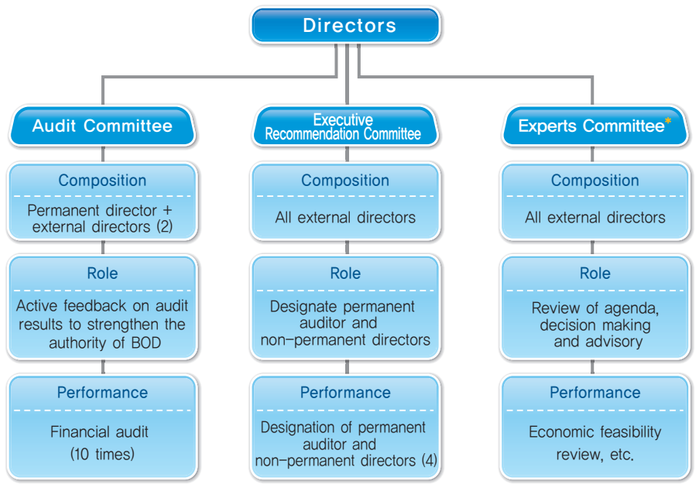
EWP is wholly owned by KEPCO since it was spun off from KEPCO on April in 2001, in accordance with the Act on the Reorganization and Promotion of Power Industry.

:: Composition of the Board of Directors

The board of directors (BOD) consists of 4 permanent executive directors and 5 non-permanent directors. To guarantee the independence of the BOD, EWP has the directors be elected through a mutual election from its external directors consisting of external figures and external non-permanent directors. To establish a responsible management system by the executive directors, the CEO has signed a presidential management and accountability contract with the Ministry of Strategy and Finance, and an internal management contract with executive directors for the evaluation of management performance and performance-related compensation. External directors are appointed among those with professional knowledge and distinguished careers, and are paid according to the BOD regulations.

:: Sub-Committees in BOD

EWP has established and operated sub-committees under the BOD to strengthen the function of the BOD.



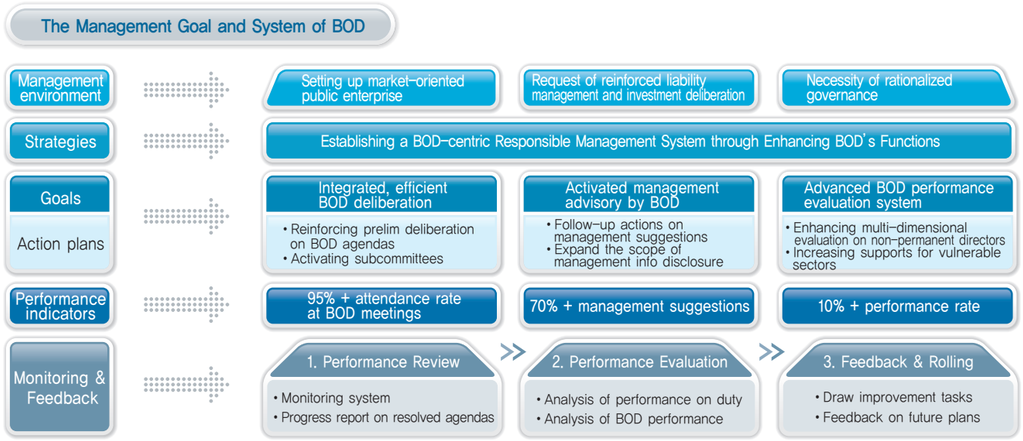
❖ Current Members of EWP's BOD

2013.12

Permanent Director	
Name	Responsibility & Role
Joo-Ok, Chang	CEO
Hae-do, Baek	Permanent Auditor
Byeong-cheon, Bang	Managing Director of Strategy and Management Division
Tae-joo, Youn	Managing Director of Technology and Safety Division

Non-Permanent Director	
Name	Responsibility & Role
Hong-geun, Lee	Regional expert, chairman of BOD
Myeong-Bok, Lee	Power industry expert
Gae-Seong, Park	Management and accounting expert
Woo-gyeom, Kim	Energy expert
Sang-Gon, Goh	Finance expert

* Experts Committee
Committee for Overseas Business, Committee for New & Renewable Energy, Business Feasibility Deliberation Council, Financial Committee and Foreign Exchange Management Board



:: Efforts to Strengthen the Role of BOD

EWP has improved the operating system of BOD to secure the independence and professionalism of non-permanent directors for effective and timely decision-making. EWP has established a separate homepage for the BOD to improve non-permanent directors' access to managerial information. Also, a system of preliminary review for the agenda was introduced to ensure the control authority of the non-permanent directors on the deliberation of the agenda and the active reflection of the advices of them on mid- and long-term core strategies and managerial policies.

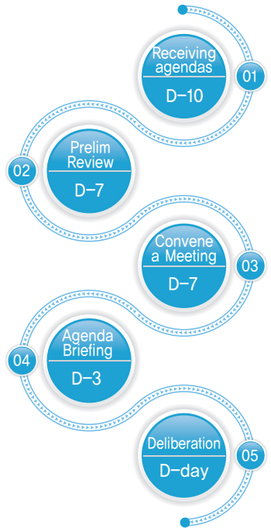
❖ Management Consulting Performances by Non-Permanent Directors

Directors	Suggested Advice
Hong-Geun, Lee (Regional Experts)	• Resolved civil complaints on Dangjin Privately-invested Power Plant project • Suggested a win-win strategy by transferring EWP's technology to the regional SMBs (→ including an expansion to a benefit sharing system)
Myeong-Bok, Lee (Power Plant Experts)	• Consulting on technology for new plant construction projects (→ contribution to reducing the construction schedule of Ulsan Combined Cycle Power Plant)
Gae-Sung, Park (CPA)	• Reviewed 2014 budget (proposal) (→ suggested zero-base budget system and ways to distribute resources in accord with the CEO's management decisions.)
Sang-Gon, Goh (Finance Experts)	• Consulting on currency management committee (→ suggested proper hedge ratio to handle exchange rate fluctuation)

❖ Performance of BOD

Overview	2011	2012	2013	Year on Year
BOD meetings (times)	12	12	11	1↓
Resolved agenda (no.)	49	36	29	7↓
Percentage of prior deliberation (%)	100%	100%	100%	–
Agenda resolved after revision (no.,%)	2(4.4%)	2건(6%)	2(7.4%)	–
Reported agenda (no.)	14	16	14	2↓
Attendance at BOD meetings (%)	85.0%	92.0%	97.0%	5%↑
Attendance on non-permanent directors (%)	73.2%	90.0%	100.0%	10%↑
Proportion of non-permanent directors' speech (%)	71.1%	82.6%	85.6%	3.0%↑

❖ BOD Operation Process



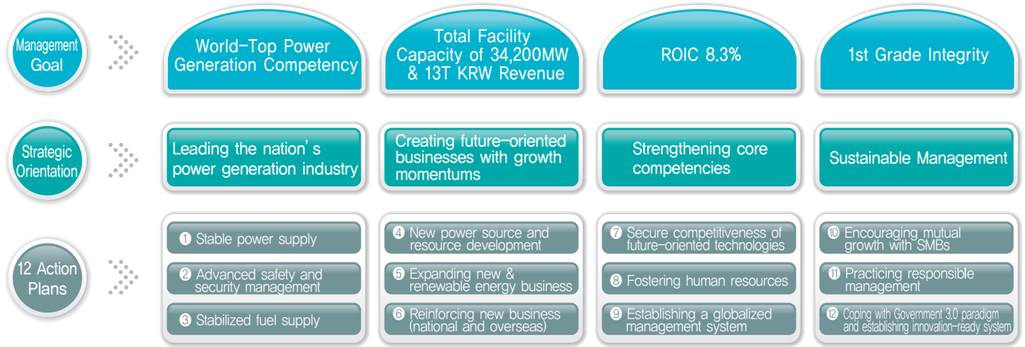
BOD's Site Visit

Sustainable Management

Based on its corporate mission and vision, core corporate values, CEO's management policy, and mission-oriented execution policies, EWP has been sharing future value with all stakeholders and practicing sustainable management for win-win growth in economic, social and environmental aspects through accumulated experiences and business capabilities.

:: Framework for Sustainable Management

To accomplish the 2030 management goal and the economic, social and environmental responsibilities, EWP has decided 4 major strategic goals : leading the nation's power generation industry, expanding businesses of new growth engine, strengthening core competency, and realizing sustainable management. These core strategies have been materialized and promoted by 12 action plans.



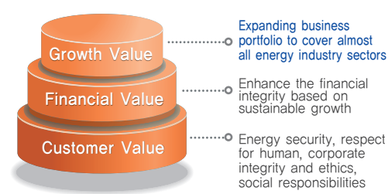
Mission : We make energy for happiness

We will produce and offer stable and environmentally-friendly energy to make human life better and happier. EWP will contribute to improving the quality of life and happiness of citizens through stabilized supply of eco-friendly energy, while properly coping with the future environmental changes in energy industry.

Vision : 2030 Most Valuable Power company

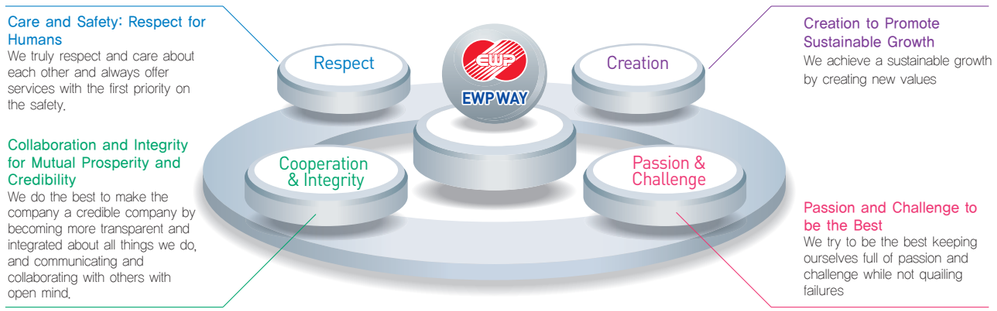
We promise to be a professional energy company that respects all of its members and creates the best value in all of its business sectors. EWP will become a globalized public company specialized in energy business that creates values by generating new business momentums and achieving sustainable growth, while fulfilling its social responsibilities.

※ 「2030 Most Valuable Power company」
Vision Statement "2030 Most Valuable Power Company": The EWP's vision shows EWP's willingness and passion for becoming an energy company that respects all of its members and creates the best value in all of its business sectors



:: Core Value

EWP has presented the four core values which are providing all of its members the behavioral basis and orientation. Based on the values, all EWP members will heartedly respect and collaborate each other and thus will achieve the company's vision 2030.

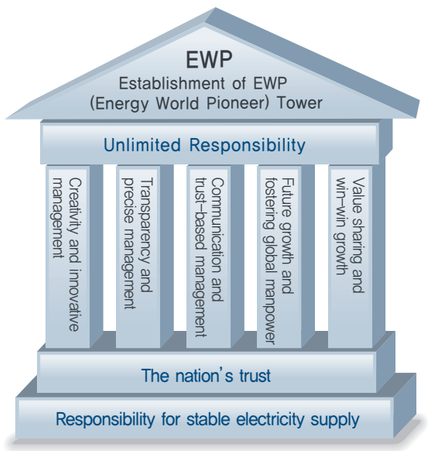


:: CEO's Management Policy

EWP has set up the core values described above as the CEO's management policy, so that 'management policy-oriented strategy' can be implemented. Based on the CEO's management policy and leveraging the management body's intent and will as well as the capabilities of the company, EWP will become a globalized energy company which grows with the stakeholders while staying in their confidence.

"Achieve the nation's trust via transparent, precise management, and establish solid and sound 'EWP Tower' via fulfilling management!"

Creativity and innovative management	Pursue creativity along with new approaches, and constant changes and innovations.
Transparency and precise management	Open management information transparently to all stakeholders, and implement honest business without unjust expedients for immediate gains.
Communication and trust-based management	Break down walls between strata with communication and trust, reflect various opinions and form a social consensus.
Future growth and fostering global manpower	Create future value through fruitful business development, foster global manpower, develop technolgy capacity, and grow sustainably.
Value sharing and win-win growth	Fulfill social responsibility as the Energy World Pioneer, and share values for win-win growth.



Risk Management

EWP has established a risk management system (RMS) based on the enterprise resource planning to cope with and prevent the risks that would be caused by the uncertainty of the domestic and overseas management environment, and the entire company is managing the risks in each area of finance & accounting, operation of power plants, fuel supply, safety from disasters, etc.

:: Risk Management System

To maintain the integration and consistency of information, EWP is running a risk management system integrated with the existing enterprise resource planning system which provides real-time information. Using this integration, EWP is monitoring 20 KRIs in 5 management areas seamlessly.

:: Risk on Power Plant Operation

EWP has maintained optimal operation and management of facilities by introducing advanced facility monitoring systems while proactively adopting scientific analysis methods and cutting-edge maintenance technologies. A worthy mention is that a proprietary smart operation diagnosis system has been developed. The system automatically analyzes the relationship between operation data collected on the relevant systems and current operation data so that the failures and degradation of facilities can be effectively prevented.

❖ Smart Operation Diagnosis Solution

Early detection of abnormal operation

:: Risk of Disasters

To prevent and actively manage disaster risks, such as power plant fire, explosion or pollutant leakage, EWP has implemented electronic disaster management system (EDMS) which is communicating with the National Disaster Management System. This system offers a rapid alert to all offices upon a disaster or emergency. To this end, EWP has also discovered disaster risks such as typhoon, heavy snow, heavy rain and tidal waves in cooperation with disaster professionals, and conducted natural disaster risk assessment program for power facilities.

❖ Disaster Management System

:: Financial Risk

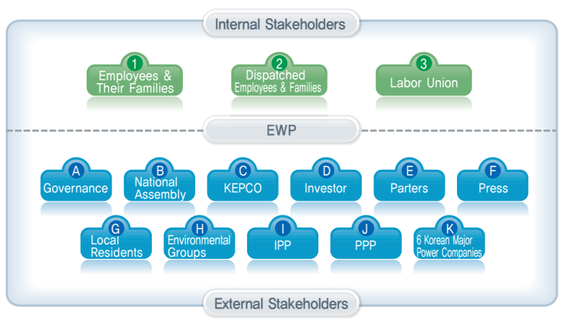
EWP has defined liability, exchange rate, interest rate and fuel cost as the critical financial risk factors. To manage these factors, EWP has implemented a liability management system (LMS) and performed liability impact assessment on every investment business.

Financial Risk Factors	Liabilities	Exchange rate	Interest	Fuel costs
Items	• Liability management • Flexibility management	• Foreign exchange risk	• Financial market monitoring • Credit rating management	• International fuel price monitoring
Risk Management Systems	• Emergency Response Office • Special Board for Liability Management • Investment Assessment Board	• Currency Management Board • Management Analysis Report	• Liability Management System • Bloomberg, Infomax • Annual Conference • IR	• Fuel Supply Emergency Response Manual • Self-Blending system • In-house Research
Operation	• Stabilizes operation of public companies and reduces the liabilities • Increases the profits while reducing costs • Securing long/short-term liquidity • Full-scale evaluation on investment programs	• Manages exchange risks, bimodal hedge standards, • real time monitoring on financial markets	• Optimizes liability and the maturity structure • Minimizes cost in raising funds to address the deficiency • Maintains outstanding credit ratings • IR activities to attract investors	• Provides response system for fuel supply emergency • Encourages group purchase of fuel by power generation companies

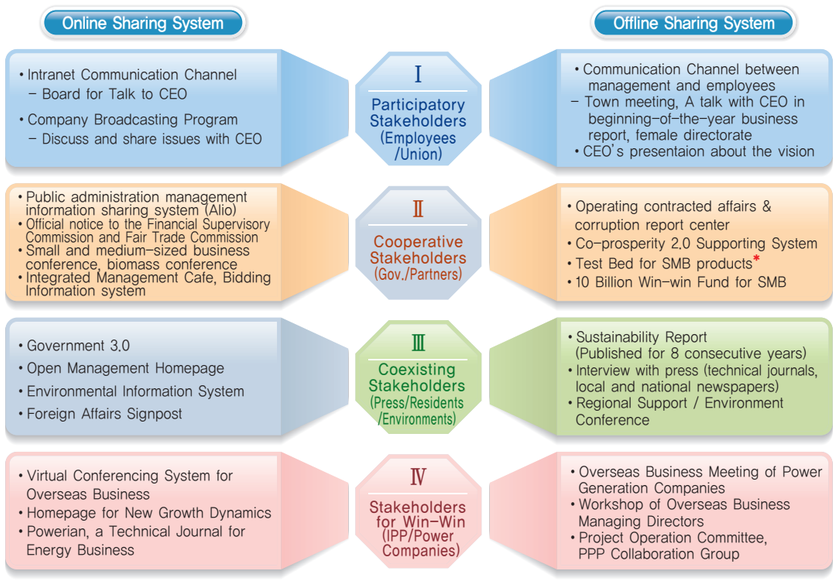
Participatory Stakeholders

As the power industry environment and the business structure have been changed, EWP has expanded the scope of stakeholders so that it can perform communication which is more centric to individual stakeholders.

❖ EWP's Stakeholders



:: Stakeholder-Centric Communication

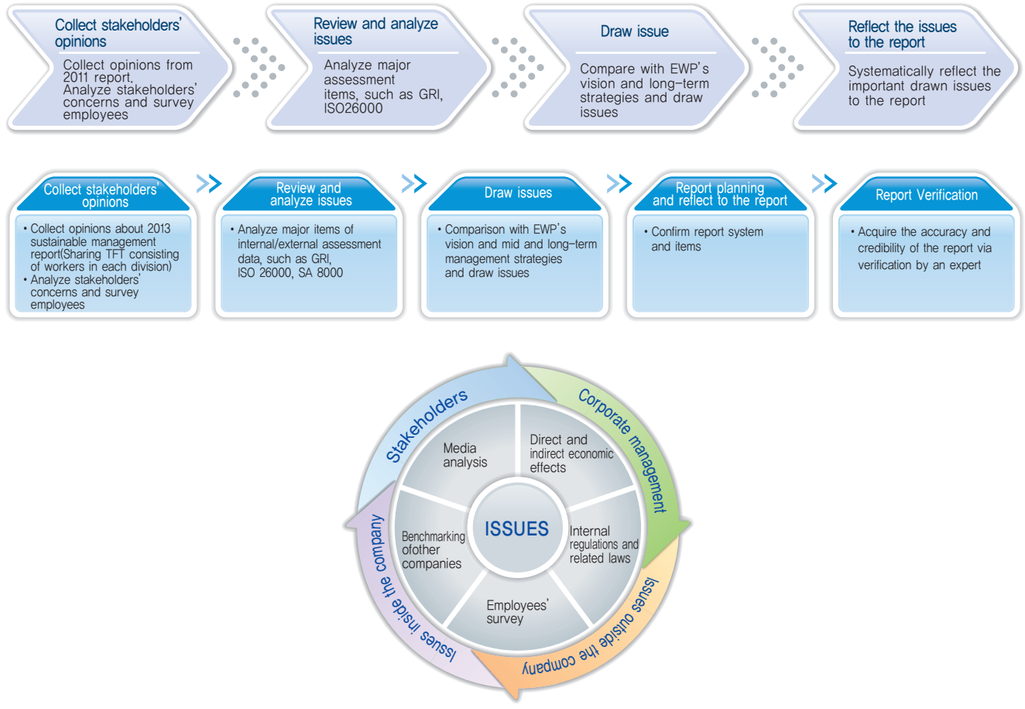


* **Test Bed Program**
A program to test-apply quality trial products manufactured by SMBs on to EWP's facilities for credibility verification.

Materiality Evaluation

In preparing the sustainability management report, it is very important to understand stakeholders' concerns and the issues that have much influence on the management of the company. EWP has conducted the materiality evaluation to reflect the various opinions and issues regarding sustainability. The materiality evaluation has derived out important issues from internal regulations, government policies and laws, direct and indirect economic effects, surveys of stakeholders, benchmarking of major companies, media analysis, etc.

:: Materiality Evaluation Procedure



:: Materiality Evaluation Results

The followings are the major issues selected through materiality evaluation on the issues of each stakeholder. We tried to include detail articulation on the performance of EWP regarding those major issues.

Economy	Environment	Employees	Business Partners	Local Community
Development of overseas markets, new & renewable energy, new domestic businesses	Counter measures against Climate change, environment protection	Welfare, human-resources and safety	Win-win growth	Coexistence with local communities

There is a future which we would make together.

Leading energy industry, EWP has sustained a mutual growth with other companies in all sizes through fostering professionals and open and participatory communication to become the best company.

Open Management

Responsible & Ethical Management
Management of Employees' Value
Human Resources
Welfare System
Labor Relations
Safety & Health

Responsible & Ethical Management

EWP has put priority in ethical management as the core element necessary to achieve the sustainability management of the company, and the code of ethics has become criteria for the performance of all works and managerial activities of employees. EWP continues implementing a variety of practices to internalize transparent and rational business culture.

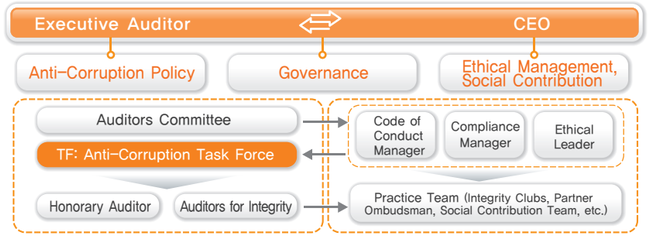
Ethical Management Implementation System

:: Strategies

To become a global energy company, EWP is performing all managerial activities on the basis of ethical management with the principle of taking the right path. We will achieve our corporate vision by promoting common interests with all employees through transparent and ethical managerial activities.

:: Organizations

EWP has operated a department which is exclusive for the implementation of ethical management. In 2013, EWP also expanded the existing programs such as Ethical Practice Leader and promoted the activities of integrity clubs in each branch office.



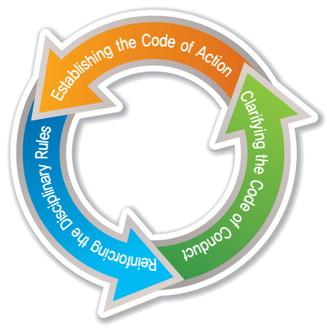
:: Ethical Standards

EWP has endeavored to enforce systematic ethical norms. In 2013, EWP revised its ethical norms to reinforce the fairness and integrity of management. Vague and abstract terms in the regulation for the integrity of management duties and Code of Ethics have been addressed by clarification. Limitations on partners hiring of managers and the regulations on the disciplinary dismissal of misconduct have been reinforced while the disciplinary actions were diversified depending on the misconduct categories.

❖ Ethical Management Organizations and Roles

Organizations		Roles
Auditors Committee		Superior body to review the soundness and integrity of internal control
Anti-Corruption TF		Decides the direction and strategies for integrity policies
External Advisory	Honorary Auditor	Participates in internal audit, policy proposal and advisory activity
	Integrity Audit Group	Monitors misconducts and collects opinions
Ethics & Integrity Practice Leader	Code of Ethics Manager	Operates Code of Ethics, accepts reports and provides counseling
	Compliance Manager	Prevention of corruption and enforces and monitors ethical practices
	Ethical Practice Leader	Enforces leading practices for ethical management
Practice Team	Integrity Clubs	Voluntarily practices integrity activities
	Partner Ombudsman	Privately-led, cooperative system for diffusion of the culture of integrity and ethics.
	Social Contribution Group	Performs social responsible roles and supports the regional/local communities

❖ Systematic Enforcement of Code of Ethics



:: Ethical Communication Program

For the integrated management of EWP, CEO delivers employees with a message for ethics on a monthly basis. Also the Website for Integrity & Ethics (called 'Mr. Youn ; a Highly Integrated Persona') has launched to increase the employees' participation in the process of integrity policy making and disseminate the culture of ethical management throughout the enterprise. Through this system, integrity and ethical issues are shared and the relevant opinions are communicated.

❖ Website for Integrity & Ethics

CEO Message

I was born in Eumseong, Chungcheongbuk-do, Korea and moved to Seoul when I was 10. I spent about 20 years of my life in Seoul. After I was married in 1982, I lived in Seongnam city and I have lived as a Gyeonggi citizen for 30 years so far.

My wife was born in Jangheung, Jeonnam, Korea and moved to Seoul around the same time. My first daughter was born in Seongnam city, second daughter was in Cheongju and my youngest son in Daejeon. My son in law was from Busan. My family is one family but the members have different origins.

You may wonder why I am telling you my family's origins. That's because I want to say that we are still experiencing biased relationships and communications around us which stick to regionalism and kinship.

〈 Omitted 〉

Let us flashback to the days we were freshman in this company. Let us look back on what was on our mind on those days. I think there is nobody who entered this company to do something good for his birthplace, mother schools and his kith and kin. Probably everyone wanted to become special personnel and to develop him- or herself in the growth of the company. For more constructive future, we are special enough to each other whatever the origin, race or educational background is. I think ethical management comes alive when all of us can keep this in mind and have unbiased view on people.

〈 Omitted 〉

Joo Ok Chang 31st, July

:: Compulsory Ethical Education Program

EWP enforces a compulsory ethical education programs and provides a diversified, systematic education so that all employees can voluntarily participate in the ethical management. Also weekly self-inspection program is enforced to all employees before logging onto the EWP intranet services, to improve the ethical awareness and free will.

※ Ethical education hours of all employees : 16,856 hours.

❖ Provision 1, Article 29 of Code of Conduct (Compulsory Integrity Education Course)

New Hires	No less than 5 hours within 6 months of hire
Executives	No less than 5 hours within 3 months of the takeover
Board members	No less than 5 hours within 3 months of inauguration

:: Preventive Report System

The 'Cyber Sinmungo' is being operated for report of unethical behaviors or corruption cases. Also, other reporting systems (e.g. acquaintance report, external activities report, requests report, etc.) are operated within the corporate network. In 2013, anonymous reporting system and a reporting system serviced by the third parties were introduced to increase the protection and compensation for the whistleblowers.

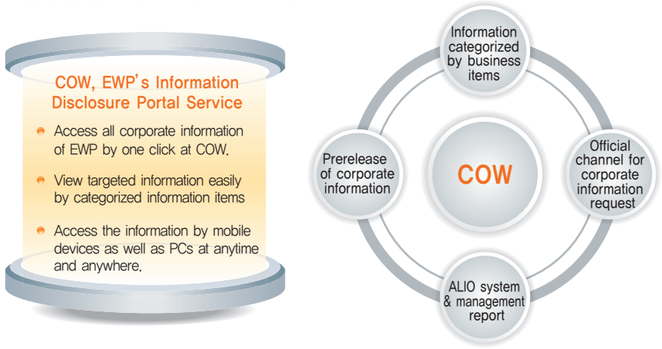
:: Systematic Disclosure of Information

EWP has disclosed the corporate information and management data through management report and has endeavored to increase the convenience of information users by regular examination and analysis of customers' needs.
In 2013, EWP implemented COW, an information portal service while expanding the scope of information disclosure and revising information disclosure protocols. Through all these efforts EWP has successfully improved the effectiveness and transparency of its information disclosure system.

❖ What is COW?

COW stands for 'Clean & Open Window'.
It is an information portal system that supports a clean communication of EWP through a clean and open window.
* Clean : implies the cleanness of EWP's management policy that discloses facts as is
* Open : EWP's philosophy of transparent management that encourages communication by leaving everything open

❖ Characteristics and Structure of COW



:: Transparent Contract System

EWP enforces clean contract system and electronic bidding system to ensure the transparency of contracted businesses. All the information of projects contracted based upon optional contract are available on EWP web site. Also investment briefing seminar is hosted on a regular basis to explain EWP's contact system and collect opinions for improvement.

:: Performance of Ethical Management

In 2013, EWP was ranked top among 29 applicants in the group II, at the Anti-Corruption Competitiveness Assessment on Public Organizations by ACRC. The assessment is a program to evaluate the integrity and anti-corruption cultures of public organizations in Korea. It is worth to note that EWP ranked top in its 3rd year of entry, which implies EWP's sincere and effective efforts for fighting corruptions. As credited with its voluntary efforts for anti-corruption, EWP won Prime Minister's commendations at 2013 Shinmungo Award (both in individual and organization sectors).

Anti-Corruption Competitiveness Assessment by ACRC	Integrity Evaluation by ACRC	KoBEX SM
Ranked Top (Grade I)	Grade II	AAA (6 consecutive years)

Management of Employees' Value

EWP is actively improving its employees' value with a goal to foster professional global manpower who will lead the power industry balancing work and life as well. A welfare system is being operated to realize the balance between work and life with fair personnel management and compensation system, continuous education and training for capability reinforcement and mid- and long-term master plan according to the capability and performance of each employee.

Human Resources Management Balancing Efficiency and Equity

:: Employees

As of Dec., 2013, total number of EWP's employees amounts to 2,231. There was no hire until 2010, as the central government has reduced overall number of employees in accordance to its restructuring policy. Also, the job opening rate decreased as a result of the 5 implementations of desired retirement programs. However, EWP is doing its best to fulfill its social responsibility to increase job opportunity and the employment rate through actively recruiting new employees and young interns for the recent 3 years from 2011 to 2013.

Overview	2011	2012	2013
Employees	1,977	2,080	2,231
Regular	1,977	2,080	2,231
Contract	2	7	29
New Hire	109	159	206
Average Service Year (years)	16.3	15.7	15.3
Turnover Rate (%)*	0.80	0.67	0.67

* Turnover rate only includes voluntary demission and resignation cases (no retirement cases are included)

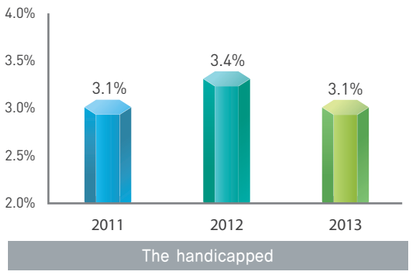
:: Creating Jobs & Leading Open Employment

Since 2001, EWP has hired a total of 1,033 new recruits through open recruitment programs. In 2013 EWP enforced a creative shiftwork program to address the practice of long hours of work, which creates 59 new jobs. No restrictions are imposed on the application for employment according to gender, age or educational background. Recruitment is decided only by one's ability and personality. Complaints about any discrimination in the recruitment procedures can be handled by the internal system including the direct report to the CEO and the 'Sinmungo' system. Especially, since 2011, EWP implemented the 30% employment quota system for high school graduates to aim the open recruitment, and EWP hired 53 'Meister' high school graduates for the last two years. In addition, an internship program ('Global Dreamalizer Program') at EWP's overseas power plant was implemented to boost the global competitiveness of the students in Meister High Schools, which received favorable responses and an award from the Minister of Education, Science & Technology in two consecutive years.

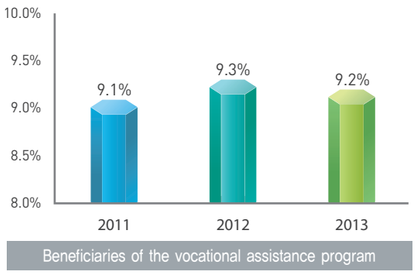
:: Employment Opportunity for the Socially Underprivileged

The employment of the handicapped and the beneficiaries of the vocational assistance program have continued to increase with the implementation of employment quota system and additional points granted to them at time of recruitment. As a result, the percentage of the employment of the handicapped is now over 3% which is the compulsory legal requirement. Discrimination is ruled out by equal personnel management for handicapped workers and all the employees receive education to improve their recognition of the handicapped. Individuals of national merit also benefit from positive discrimination through the employment quota system and the grant of additional points. Approximately 9.3% of EWP's employees are filled with patriots & veterans and their children as a result of active implementation of socially fair employment.

❖ Results of Employment Expansion for the Socially Underprivileged



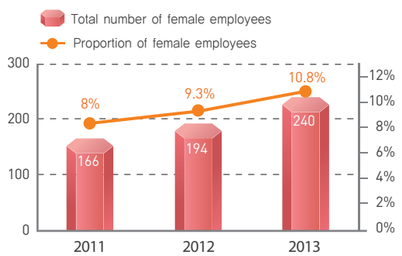
The handicapped



Beneficiaries of the vocational assistance program

:: Gender Equality

There are 240 female workers in EWP, accounting for 10.8% of total number of employees. In 2013, approximately 23% of new hires were female including records management experts. A fair standard is applied to women workers at EWP with no discrimination in employment, promotion, compensation, etc. To fully recognize gender equality, EWP is making continuous efforts to expand the employment of women gradually including female board of directors and quota for female workers. In 2013 EWP was selected by the Ministry of Employment and Labor, as the best practice company of Gender Equality Employment.



:: Supporting Work-Family Balances

Establishing a life-cycle welfare system and a flexible workplace model, EWP promotes policies that practically support both work and family by creating an advantageous infrastructure for child-rearing. EWP has carried out a systematic family orientation program through Korean Institute for Healthy Family's local support offices and EWP's six local branch offices, for more than 30 times every year since 2010 when EWP closed a partnership with KIHF. In 2013, EWP re-acquired a Certificate of Family-Friendly Company from the Ministry of Gender Equality and Family.

Human Resources

:: Discovery of Educational Needs for the Organization & Employees

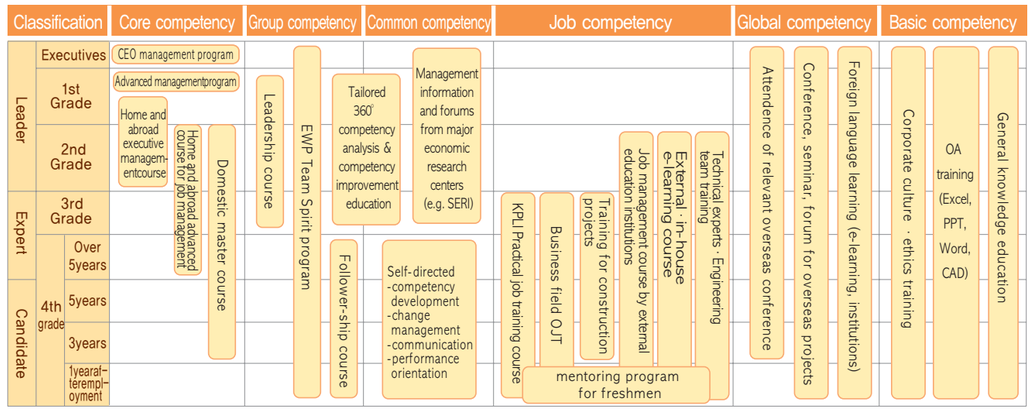
The company's educational needs for strategic human resource development are confirmed through external management environments, government policy analysis, EWP's value system and strategic management plans. Various educational needs for the company and its employees are established via employees' competency analysis based on the competency model, company surveys, self-directed competency development planning, etc.

:: Establishment & Implementation of Mid/Long-Term Education Plan

EWP has set a goal for fostering next generation leaders and experts in each field according to EWP's strategic direction and educational needs, and has established and been implementing the mid- and long-term education plan to constantly foster essential human resources for domestic and overseas energy industries. Also, the competency improvement system for self-directed competency development is now available to help employees establish and carry out an individual self-development plan.

:: Various Competency Improvement Programs

EWP is operating various educational programs to foster workers' diverse competency and career development. The system of education and training classified into many programs for each position and duty is as follows.



:: Long-term Consigned Educational Program for Next Generation Leaders

EWP develops and implements various industry-academic long-term consigned educational programs for employees' management administration and professional job competency development. With various degree courses, such as public enterprise policy making programs that are linked to prestigious national or international universities, CEO management programs, MBA programs, generating unit design courses and maintenance professional courses, EWP makes an effort to secure human resources for future growth.

6 2014년 2월 24일 월요일

"발전소 안전사고 예방 교대근무자 효능감 고취 중요"

이준섭 동서발전 처장 박사학위 논문서 주장
발전소 근무자의 안정적 근무 위한 지표 활용 기대

In-House College Programs for New Hires with High School Diploma

EWP has been leading an open employment system where the hands-on ability and competency are preferred to the background. For not only new hires but also existing employees who have high school diplomas only, EWP has signed a partnership agreement with some universities on the establishment in-house college courses for the employees. In Feb, 2014, the courses were launched with 40 students. EWP will continue to provide employees with educational services to foster professional engineers with hands-on knowledge and promote the Work to School programs.

In-house college entrance ceremony

Fostering Power Facility Design & Maintenance Experts

EWP's engineers start their duty after a compulsory and advanced education courses on power generation facility at Korea Power Learning Institute. Also, Simulation & Training Center at Dangjin Plant site is offering professional courses on practical coal-fired power plant operation techniques and skills. EWP has also endeavored to maintain and further develop collective facility maintenance capabilities and relevant technologies through Technology Experts System through which hands-on knowledge is transferred from power generation facility manufacturers, designers and professional maintenance engineering organizations.

Fostering Global Manpower for Overseas Expansion

EWP operates Global Pioneer program to develop overseas business experts in accordance with the enterprise's overseas business plan. Foreign language courses and systematic job training programs are provided to train the best human resources tailored for the company's overseas business.

Self-Directed Smart Learning Using Ubiquitous Mobile Technologies

To build a proper and constant learning environment, EWP operates mobile learning using smart devices. Regardless of when and where, employees can participate in various educational programs, such as leadership, foreign language, humanity and self-development courses, or well-known lectures, through wireless internet.

Educational Programs for Organization Culture

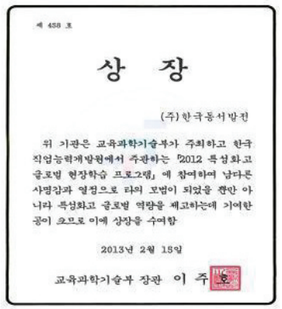
There are many programs promoting the organization cultures. With the manager leadership competency programs, such as leadership coaching, the refreshing program for managing employees' changes, the team spirit strengthening program for team-work building and "book reading company"for convergence competency, EWP makes an effort to build creative and communicative organization culture.

Lifetime Education Program

The education service for those who are soon to retire is being provided to help them stay with psychological stability and fulfill the company's social responsibility according to the extension of the average lifespan. Through the education, the people will be able to lead a successful life after retirement. The contents of the educational course include the skills on management of personal assets and health, launching a business, re-employment, stress management, etc.

Free skill trainings for external workers

With EWP's excellent technicians, EWP provides training for increasing generation technology understanding for SME workers, realizing co-prosperity with SMEs. In addition, EWP also operates basic generation courses at the simulation center of Dangjin Coal Fired Power Complex for local college students and specialized high school students, who will become leaders in the power generation field in the future. Especially, the global field training for specialized high school students unprecedentedly received an award in two consecutive years(2012 and 2013) from the Minister of Education, Science & Technology.



제 458 호

상 장

(주)한국동서발전

위 기관은 교육과학기술부가 주최하고 한국직업능력개발원에서 주관하는 '2012 특성화고 글로벌 현장학습 프로그램' 에 참여하여 남다른 사명감과 열정으로 타의 모범이 되었을 뿐만 아니라 특성화고 글로벌 역량을 제고하는데 기여한 공이 크므로 이에 상장을 수여함

2013년 2월 15일

교육과학기술부 장관 이 주 호

Investment on Training Programs

❖ Training Expense & Hours

Classification	2011	2012	2013
Training Expense (thousand won / person)	3,310	3,367	3,515
Training Expense against Budget (%)	0.97	0.94	0.90
Annual training hours (hours/person)	110	96	109

❖ Participants of Training Programs

Classification	2011	2012	2013
In-house Training	6,486	5,049	6,308
Commissioned (at home)	10,380	10,622	13,584
Commissioned (overseas)	27	69	17
Total	16,893	15,740	19,909

* In-house training includes self-developed programs and field training.

Welfare System for Happy Workplace & Home

EWP is implementing various welfare programs to increase employees' satisfaction by expanding work-family compatibility culture and realizing family-friendly policies. Various programs have been implemented such as 'Day for Family' and family programs and several cultural programs. Flexible business hours and convenient facilities for moms are just parts of the diversified welfare programs of EWP which were prepared to contribute to addressing the low fertility, a national issue. EWP has also actively participated in the national government's family-oriented policies by implementing systematic family-friendly policies through a partnership with Korean Institute for Healthy Family and Planned Population Federation of Korea.

:: Promoting Family-Friendly Corporate Cultures

To form a family-friendly company culture, EWP continuously designates every Wednesday as a Day for Family Love. In addition, since April, 2013, after the CEO sent a message about turning off the lights and PCs in offices, EWP implemented them in all workplaces of EWP. Also, EWP strongly encourages employees not to work late and to leave work on time every Friday. In April, 2013, EWP established the WLB Family Center consisting of four divisions (Welfare, HR, Membership and Social Contribution through Family Support). Through the center, EWP has investigated the requirements and needs of employees and reflects them onto the corporate policies such as invitation from mom's and dad's workplace, child vacation programs about English or national security and resort facilities during summer vacation. In cooperation with the Korean Institute for Healthy Family located near each workplace, differentiated family education programs are being operated for each type of family including children, spouses and parents.

:: Improved Incentives for Improved Female Employees Status

EWP has been active in making the workplace and environment friendly to women. On October 2013, the female board of directors was established and the BOD has been actively communicating with CEO and promoting work-family compatibility policies by investigating requirements and opinions. Working hours for female employees in less than 12 weeks or more than 36 weeks pregnancy have been reduced to 6 from 8 hours a day. Also, moms with a baby no less than two years can have a given amount of time for their breast feeding, which was only given to moms with a baby up to 1 year old.
In addition, maternity leave requirements were changed to children less than 9 in their age or in the 3rdgrade in their elementary schools. Moreover, the sabbatical leave system is now more enhancing work-family compatibility.

Experience of ecological culture in Namdo


Experience of making cakes

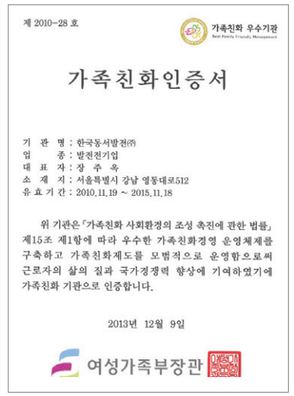
:: Welfare System Based on Various Employees' Requirements

To promote health of its employees, EWP is supporting operation of in-house physical training facilities and physical examination. Other various welfare programs for employees and their families include residential support with company housing and dormitory, compensation of school expenses for employees' children, optional welfare points, etc. To reflect employees' opinions to the operation of the welfare system, the summer resort spots are selected after surveying employees' preferences, and the satisfaction of employees with the welfare system is surveyed every year to monitor employees' opinions and reflect the results for the improvement of the system. As a result of the support for various welfare systems, employees' satisfaction has increased and, externally, EWP received the Certificate of Family Friendly Company from the Minister of Gender Equality & Family which was first issued in 2010 and recently validated until 2015.

❖ Welfare Programs in Operation

Category	Programs	Description
Create a better environment for childbirth and child-care	Baby Shower System	Presents gifts of books for prenatal education
	Prenatal Medical Check-up	Support pregnant employees for a part of the expense for prenatal medical check-up
	Childbirth Grant	Give congratulatory incentive for childbirth (0.5~2 million won)
	Support consigned day-care center at the company	Support the consigned day-care centers (Up to 50% of the expenses set by the government for 5-or-less-year-old children)
	Install and operate day-care center in the company	Head office and Dangjin Power Plant
	Support children's education	Support tuition for children attending middle & high school and university
		Support with dormitory for offspring attending universities located in the metropolitan area
Support for employees and their families	Optional welfare programs	Support with self-help programs, family anniversary dates, etc.
	Employee Assistance Program	Implement education for employees' family and financial counseling
	Support for family events	Vacation for family event and payment for congratulations and condolences
	Support at time of natural disasters	Grant aid in case of complete or partial burning down and breaking down and flooding in natural disasters
	Support family-unit event programs	Support with weekend family experiencing event and the experience of dad's workplace
Support for stability of residence and living	Loan money for house	Give loan for purchase or rent of a house
	Loan money for stability of life	Give loan at low interest rates for employees who have been working for more than 1 year
	Support for accommodation	Provide a company housing for the employees working at local power plants. Dormitory is provided for those who are working in the metropolitan area.
Support for leisure culture	Operation of living training center	Rooms in living training center in Sokcho, Suanbo, Muju, etc. are provided.
	Support for resort facilities during summer vacation	The resort facilities near the power plant are provided during summer vacation season
	Discounts with agreements related to leisure activities	Transportation : train and airplane (3 companies) Accommodation : Hotels and motels nationwide (10 companies) Travel : Domestic and overseas travel package (2 companies)
Support for healthy life	Support for collective insurance for protection	Seven items are guaranteed including death by disaster, death by disease, disability by disaster and cancer diagnosis
	Assist medical check-up	Legal physical exam and special check-up are conducted once a year
	Discounts at hospitals	Discounts are granted for a comprehensive medical testing and treatments at dental clinics, eye clinics, etc. by signing agreements with 17 hospitals and clinics located near the company's workplaces nationwide
	Physical Training Center	Support with the installation of exercising facilities within the workplaces (fitness center, soccer field, etc.)
Incentives	Incentive training for meritorious workers	Support with training for meritorious workers and their family
Support after retirement	Keeping retiring allowance reserve	The pension program was adopted in 2011 to give a choice between the lump sum payment of retirement pay and a pension)

❖ Certificate of Family Friendly Company (Ministry of Gender Equality and Family Korea


제 2010-28 호

가족친화 우수기관

가족친화인증서

기 관 명 : 한국동서발전㈜
업 종 : 발전전기업
대 표 자 : 장 주 옥
소 재 지 : 서울특별시 강남 영동대로512
유 효 기 간 : 2010.11.19 ~ 2015.11.18

위 기관은 「가족친화 사회환경의 조성 촉진에 관한 법률」 제15조 제1항에 따라 우수한 가족친화경영 운영체제를 구축하고 가족친화제도를 모범적으로 운영함으로써 근로자의 삶의 질과 국가경쟁력 향상에 기여하였기에 가족친화 기관으로 인증합니다.

2013년 12월 9일

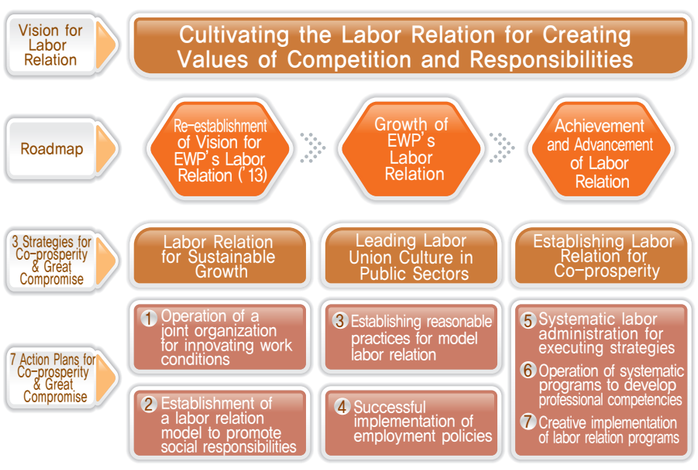
여성가족부장관

Labor Relations for Co-prosperity & Great Compromise

In January, 2012, a procedure for a single bargaining channel, one part of a multiple labor union system, was conducted in EWP, and the enterprise labor union, EWP Labor union, which was the single participant of the procedure, acquired the position of the labor union of bargaining representative, and made a collective agreement with the management about payment on 17th of December, 2012. The right for bargaining representative remains until the 16th of December, 2014. On the other hand, the industry union, Korean Power Plant Industry Labor Union, did not participate in the single bargaining channel procedure and was maintaining a separate collective agreement. And, as their agreement was expired in March, 2013, the single bargaining channel in EWP has been enforced finally. Due to the enforcement of multiple labor union systems, EWP respects the status of the single bargaining channel, and makes an effort to build the labor-management relationship of communication, cooperation and discussion, preventing unreasonable discrimination and maintaining neutrality not taking side with any of the two labor unions.

:: Labor Relation Model for Co-Prosperity and Social Responsibilities

❖ Mid- & Long-Term Labor Relation Roadmap



EWP has endeavored to establish an advanced labor culture and a productive labor relation based on the credibility and negotiation. The union has been actively participating in and contributing to various policies and programs such as family-friendly policy, respect different lifestyle, social awareness improvement, support technological competencies of SMBs, improvement of partner companies, reinforcement of social contribution activities, activation of local/regional communities, etc. The union has also enforced programs supporting central government initiatives such as 'maternity protection', 'compatibility of work and family', 'childbirth support', etc. In addition, EWP has launched a participatory discussion group for systematic enforcement of the action items and has made an effort to establish a model for labor relation supporting co-prosperity and great compromise by hiring 59 recruits through the 'shiftwork program for sharing jobs' program.

:: Encouraging Credible Labor Relation through Reinforcing Communication Channels

As a part of efforts to encourage credible labor relation through establishing develop a consensus, EWP has implemented and operated communication channels in collaboration with multiple labor unions, and endeavored to address the labor issues effectively.

Channels	Organization & Performances
Labor Management Conference for Win-Win Growth & Social Responsibility	Consists of executives and representatives of the major labor union, managing directors and executives and representatives of minor unions Performances : introduced the new shiftwork program for sharing jobs and changes of compensation system (duty-centric compensation)
Open Labor Management Conference	Negotiation members of the major union and the company and representatives of minor unions Performances : prompting rational welfare programs – Reduced tuition support for middle and high school students and suggested the single bargaining window
WLB Family Friendly Center	Composition : four divisions (FR, HR, ER and HSR) joint operated by the labor union and the management FR : Family Relations, HR : Human Relations, ER : Employee Relations, FSR : Family Social Responsibility Performances : reduced the working hours of pregnant workers (8 to 6 hrs.), enforcement of baby care hours (for babies less than 2 years old, no less than 30 minutes, up to 2 times per day), relaxed the requirements for maternity leave (children up to 9 or more than 3rd grade elementary students)

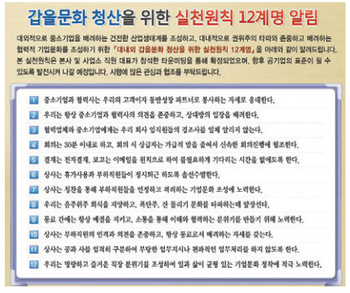
:: Reasonable Compensation & Collective Agreement

During the collective bargaining with the representative union of bargaining, the labor and the management achieved a collective agreement about reasonable modification of excessive violation articles about management rights and stable settlement of the plural union system via fair representation assignment.
Especially, in 2013 the labor-management agreed upon the detailed management standards, such as arrangement of terms about the exemption limit of working hours, the determination of total working hour exemption limit, proportional allocation based on the number of union member and adjustment when a new union is established or the number of union members changes, to developed the rationality of the time-off system.

:: Promoting the Culture for Fair Society

EWP has addressed "Twelve Rules for Rooting out Unfair Practices" to foster a new corporate culture promoting co-prosperity and mutual growth with contractors. Also, EWP has carried out multiple workshops and interviews in collaboration with its partner companies offering on premise services and representatives of those partner companies. Through these efforts, EWP makes a constant effort to encourage its partners and create a consensus while promoting campaigns to make the workplace happier.

❖ 12 Rules for Rooting Out Unfair Practices



Safety & Health

EWP regards the safety and health of its employees as a matter of the highest priority, and is making continuous efforts to establish an advanced disaster management system and the enterprise-wide awareness of safety.

❖ Safety & Health Principles

EWP sets the Safety & Health Principles under the company's vision of Global Top 10 Energy Company for following the CEO's Management Policy and realizing internal and external customers satisfaction

1. Establishment of Proactive Disaster Prevention & Management System
2. Prevention of Safety Accidents by Compliance with Basic Rules
3. Management of Human Health

To this end, all organizations consisting of EWP make efforts to enhance the systems so that the safety and health management can be enforced continuously, and to prevent safety accidents from occurring through complying with basic safety rules. The safety and health management department shall operate overall safety and health management affairs of the company and perform proper activities and practices through tracing and managing the progresses on a regular basis.

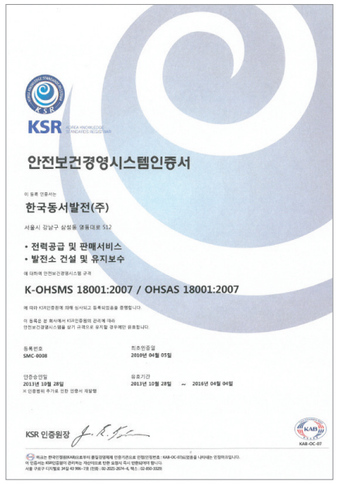
The managing directors of the divisions at headquarters and the presidents of branch offices and plants shall make their best efforts to establish the roles of departments for active inter-department cooperation and horizontal cooperation, while the head of departments shall encourage safety working environment with no accident in their business locations through safety and health monitoring and supervision, improvement of possibly harming conditions, and relevant education programs.

All the members of EWP shall take the immediate responsibility in ensuring safe and healthy working environment, and contribute to achieving Zero Accident Workplace through complying with the safety and health laws, regulations, rules and instructions.

2013. January

Chang Joo Ok
President & CEO of Korea East West Power

❖ A certificate of safety and health management


KSR

안전보건경영시스템인증서

한국동서발전(주)

서울시 강남구 삼성동 영동대로 512

• 전력공급 및 판매서비스
• 발전소 건설 및 유지보수

K-OHSMS 18001:2007 / OHSAS 18001:2007

등록번호 SMC-0008

최초인증일 2005년 04월 01일

인증승인일 2013년 10월 28일

유효기간 2013년 10월 28일 ~ 2016년 04월 04일

KSR 인증원장

:: Certificate of Safety Management System

EWP has implemented a system certified both KOSHA18001 (Korea Occupational Safety and Health Agency) and OHSAS18001 (Occupational Safety and Health Administration of United States.) EWP extended the system to include its HQ and all branch offices and maintained the controlled status through precise post management processes.

❖ Work-Related Accidents

Index	2010	2011	2012
Absence (accident rate(%))	0.00	0.00	0.00
Accident Type (employees)	Death0, Injury0	Death0, Injury0	Death0, Injury0
Average for Three Utility Businesses (Electricity-Gas-Water Supply)	0.19	0.19	0.17

(Source : Ministry of Employment & Labor, Updates for 2-13 will be available on August, 2014.)

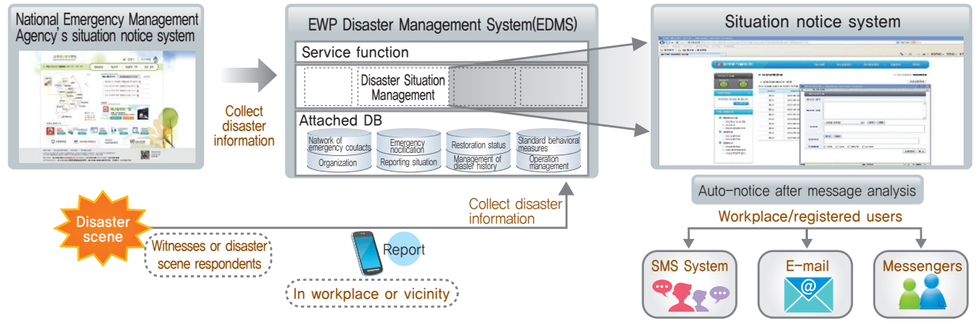
❖ KOSHA 18001 Certification

Classification	First Certification	Post Facto Review
HQ	2010.04.28	2014.04.22
Dangjin	2012.10.14	2013.07.08
Ulsan	2012.10.15	2013.10.16
Honam	2010.12.03	2013.06.19
Donghae	2012.12.05	2013.06.12
Ilsan	2011.06.11	2014.04.28

KOSHA : Korea Occupational Safety and Health Agency (Domestic Standard)

:: Integrated Disaster Management System

To forestall and actively manage disaster risks, such as power plant fire, explosion or environmental pollutant leakage, EWP has established the disaster management system that is directly linked to National Disaster Management System (NDMS). Also in 2013 EWP implemented a disaster reporting system that immediately delivers notices to the residents upon the disaster by leveraging existing broadcasting systems and facilities.



:: Safety Management Committee

To increase the organization's disaster and safety management capabilities and establish a foundation to improve employees' awareness of safety, EWP has founded 'Safety Management Committee' consisting of 12 external and internal experts. The committee provides consulting services for safety management and establishes strategies, while deliberating and resolving policies for cause analysis and prevention measures.

:: Selected as the Best Organization at Disaster and Safety Assessment

EWP acquired the best grade (S-Grade) at 2013 Disaster Response Drill, a nation-wide disaster prevention drill carried out to examine disaster prevention systems and disaster responsiveness of 15 organizations under the Ministry of Trade, Industry and Energy. In addition, at 2013 National Infrastructure Disaster Management Evaluation, Dangjin plant won the Prime Minister Award and Ulsan plant won the citation from the Minister of Security and Public Administration. 37 electricity, gas and oil facilities were investigated and just three facilities which were awarded at the evaluation. It is worth to mention that EWP has won two awards. Based on this successful safety management experiences, EWP will continue to improve the company's disaster responsiveness and the proactive disaster management system.

:: Health Promotion Programs

EWP has endeavored to prevent diseases and relieve stresses through systematic health management programs, and thus improve the work efficiency and productivity by generating a friendly work environment. This health promotion system has been enforced as a part of the company's humanism policy. At all offices and business locations of EWP healthcare services by health professionals are readily available while the personal health data is systematically collected and managed in a central database by leveraging recently introduced healthcare equipment such as cutting-edge body composition analyzer and diagnosis software. In addition health promotion campaigns (anti-smoking, anti-alcoholism, stress-free, etc.) were launched, and the work environment assessment was carried out. The assessment results were also reflected to the relevant improvement strategies and plans which are submitted to Industrial Safety and Health Committee on a regular basis.

❖ Work Environment Assessment

Assessment items	Cycle	Target
Noise and dust	Twice a year	Facility with strong noise and site dealing with bituminous coal
In-door (office) air condition	Twice a year	Offices and control rooms
Specific chemicals & organic solvent	Yearly	Experiment labs, sites handling solvents

There is a sharing which we would enjoy.

Sustainable growth of EWP is not possible without participation of the local communities. EWP has fulfilled its social responsibilities and shared values with the societies.

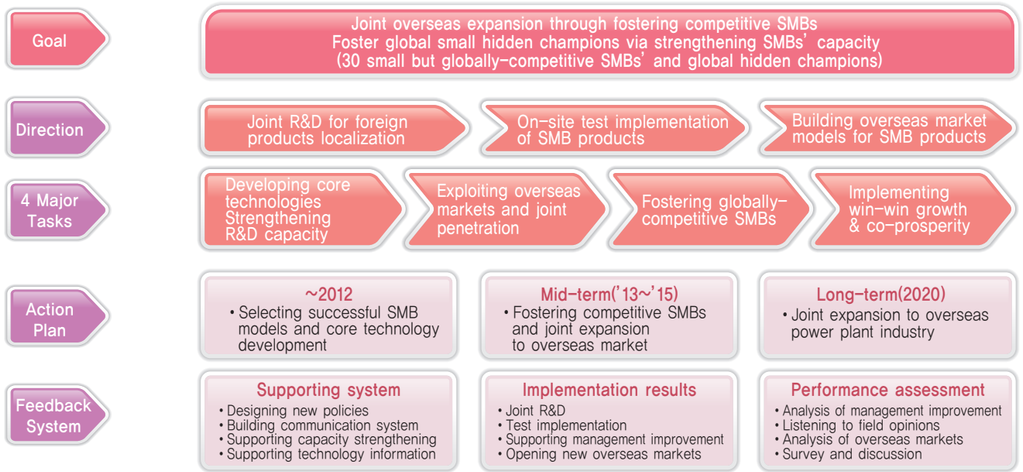
Coexistence with Local Communities

Win-Win Growth
Coexistence & Sharing

Win-Win Growth

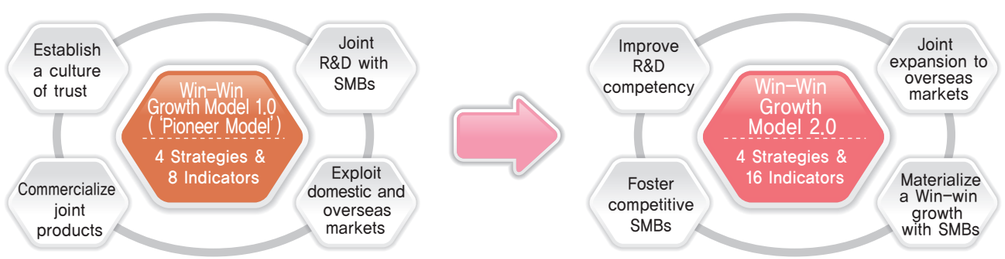
:: Visions and Action Plans for Win-Win Growth with SMBs

EWP has established the corporate philosophy and framework for promoting mutual growth with small and medium-sized businesses and implemented year-by-year customized support programs to contribute to nurturing SMBs. Especially, EWP has supported SMBs to better protect their promising technologies, gain the reliability over their productions from market, improve their competitiveness and efficiently penetrate markets. Through these supports, EWP has contributed to the existence and the growth of 30 small but globally-competitive SMBS.



:: EWP's Win-Win Growth Model 2.0

To address the SMB's contemporary demands and overcome the limitations of domestic markets, EWP has announced the Win-win Growth Model 2.0 in January 2013. This new model is devised to foster globally competitive SMBs which have developed competitiveness and now are entering into their growth phase through the previous version of the win-win growth model, Win-Win Growth Pioneer Model. EWP has a plan to support SMBs' core technology development and to directly discover special agencies for opening overseas markets to constantly make new markets. In the long term, EWP aims to achieve the win-win growth with 30 globally-competitive SMBs, after joint expansion to overseas power plant business that is currently operated by EWP.



:: CEO's Field Management

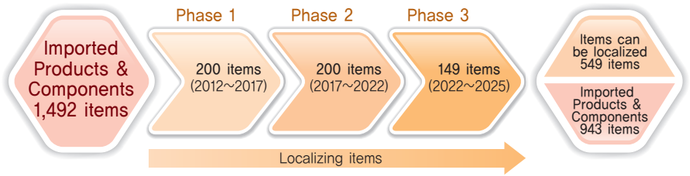
Since 2010, EWP has been designating 30 successful SMB models from EWP's SMB partners and operating tailored nurturing programs in order to foster globally competitive SMBS. In addition, the CEO has visited business fields to directly communicate with SMBs to understand their difficulties and opinions. Especially in 2013, CEO visited 33 SMBs for 100 days and discussed the suggestions and pain points with the representatives from the SMBs. All the opinions were later collected and analyzed and therefore 86 out of 90 suggestions were accepted and the relevant actions were properly taken.

:: Expand Localization Ratio through Joint Development Projects

EWP operates the academic-industry cooperated technical research committee to transfer technologies to SMBs. Also, the enforcement of '1 on 1 Tech-Friend System' between EWP plant managers and SMBs, EWP has offered SMBs with technology information and supported their patent registration and certification acquisition practices. These efforts were significantly contributing to increasing the SMBs' competitiveness.

In order to strengthen Korean SMBs' technology competency, imported components that have been in use in EWP's thermal power plants and combined thermal power plants for the last three years were analyzed for localization, and EWP offered SMBs with information on the components to help them effectively localize the overseas, advanced facilities.

❖ Mid- and long term plan for developing component localization



EWP has designated 549 items for localization for recent three years. It also operated a technical research committee for joint researches with SMBs and made public this joint program through newspapers and journals so that SMBs that have supplied to EWP or ones that emerged with new technologies can join. As a result, EWP made a significant contribution to strengthening the technological competency of Korean SMBs in the power generation-related industry. EWP also handed over 15 technologies for free to SMBs in 2013.

❖ Gratuitous/Credited Patented Technology Transfers

Patents Held (cases)		Technology Transfers to SMBs (cases)		
Applied	Registered	Gratuitous	Credited	Total
210	149	43	20	63

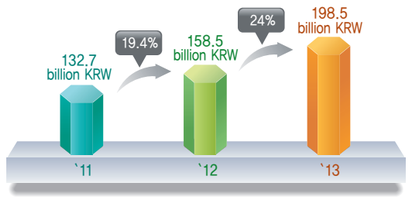
❖ Joint R&D Projects (2004~2013)

Classification	Cases	Research Fund (100 million Won)
Government Project	95	679.1
R&D Collaboration	184	494.03
Research Project for Procurement	94	308.16
Field Research	45	125
Total	418	1,606.29

:: Expanding Purchase of SMBs' Products

In 2013 alone EWP has purchased SMBs products worth of 19.4 billion won to support the system of public purchase of SMBs' products and encourage SMB's sales growth. EWP also purchased products produced by woman CEOs which amounts to 15.6 billion won in 2013 to assist the brisk social activities of women. In total, the EWP's total purchase of SMB products amounts to 198.5 billion won, which exceeded the original budget of 182.5 billion won. To give credit for EWP's active roles in supporting SMB's growth and relevant initiatives, a Prime Minister Award for Public Purchase Best Practice was awarded to EWP in 2013.

❖ EWP's Purchase of SMB Products in Recent 3 Years



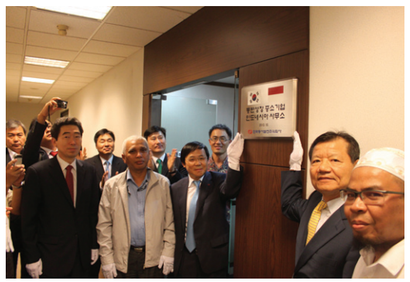
:: Helping SMBs Exploit Domestic and Overseas Markets

To help SMBs' domestic marketing activities, EWP supported 148 companies in 6 exhibitions including the Global Automated Precision Equipment Exhibition where they have completed business consultation for 5,799 million dollars and received purchase order amounting to about 748 million dollars. EWP also supported SMBs to maximize the product marking by helping them produce promotional sales kits and have public relation activities and ads on 15 professional journals. To help SMBs exploit overseas markets, EWP supported 105 SMBs to participate in 6 international exhibitions including Dubai WETEX where they have completed business consultation for about 152 million dollars and received purchase order amounting to about 18 million dollars. To increase exports of SMBs, EWP also invited foreign buyers from China, India and the Middle East, so the 473 SMBs were registered in the vendor pool, with 1,243 million dollars consultation and purchase orders amounting to about 625 million dollars. Also, to support SMBs' export to east and south Asian countries, EWP opened an office of Mutual Growth in Jakarta, Indonesia in 2013. Through the office EWP has supported SMBs to exploit overseas markets. For example, Powernix, an SMB acquired a 2 million dollars export project through this program, has utilized the office as the base for their overseas business and market exploitation.

❖ SMBs' Domestic and Overseas Market Exploitation Unit : Million dollars

Classification	2012			2013		
	Participating Companies	Worth of Business Consultation Completed	Worth of Purchase Orders Made	Participating Companies	Worth of Business Consultation Completed	Worth of Purchase Orders Made
Exhibitions at Home	142	4,088	164	148	5,799	748
Overseas Exhibitions	98	456	92	105	152	18
Vender Registration & Export Consultation	299	1,043	81	473	1,243	625

❖ EWP's office for win-win growth in Indonesia



:: First Public Enterprise to Test-Implement SMB Products in Its Plant Site

To validate the credibility of SMB's technology, EWP has contracted partnership agreements with various SMBs and test-implemented products offered by 36 SMBs in its 5 plant sites, since June, 2011. Through EWP's effort the credibility of the technologies offered by SMBs have been proved.

:: Industrial Innovation 3.0

EWP has been actively participating in the central government's Industrial Innovation 3.0 initiatives, and came up with EWP Industrial Innovation 3.0 to create an innovative changes in the three focused areas – factories, safety and product quality and technology transfer. For the factory innovation, EWP enforced factory innovation activities on 7 companies to make them smart factories. For the safety and product quality, education programs on safety workplace creation and quality management were instituted. Lastly, to improve the technological competency of SMBs, 12 SMBs were given maintenance and repair technology and skill transfers.

Industrial innovation campaign

:: Establishment of 2nd and 3rd Grade Conference Groups & Discovering and Nurturing SMBs around EWP's Plant Sites.

To provide a systematic support to SMBs so that SMBs can develop their competitiveness while a mutual growth ecosystem can be created and endorsed, EWP has signed on a partnership agreement for establishment and operation of the Mutual Growth conference, with 50 SMBs who are EWP's 2nd and 3rd tier partner pool. Through this conference, EWP is discovering SMBs' needs regarding the mutual growth with 2nd and 3rd level SMB partners and promoting a great cooperation through exchange of information, joint development projects, joint market penetration, etc.

Launch of the Mutual Growth Conference Group

:: $10 Billion Fund for Addressing SMBs' Deficiency

To address the financial deficiency of SMBs in investing facility and purchasing raw materials, EWP has raised an SMB investment fund amounting to 10 billion KRW with IBK Bank. The fund will be utilized for loan service to EWP's 1st, 2nd and 3rd partners. With the low interest rate ranges from 1.62%p to 2.92%p, which have been controlled by EWPs deposit interest earnings, the loan service will help those SMBs write off debts they previously acquired.

Agreement on Mutual Growth Fund

Coexistence & Sharing

As a public enterprise which produces the public goods, electricity, EWP not only creates economic value which is the intrinsic managerial activity of a company but also, under the mission that EWP makes our lives enriched with eco-friendly, economical and stable power supply, does various social contribution activities to make a society for coexistence fulfilling its social responsibilities and roles as a corporate citizen. Above all, the operation of a power plant is closely related with the local community, and mutual understanding and cooperation is increasingly important. Thus communication and cooperation in many aspects are being pursued to form a partnership for co-prosperity in which the power plant makes efforts for the development of the community and the community welcomes the power plant.

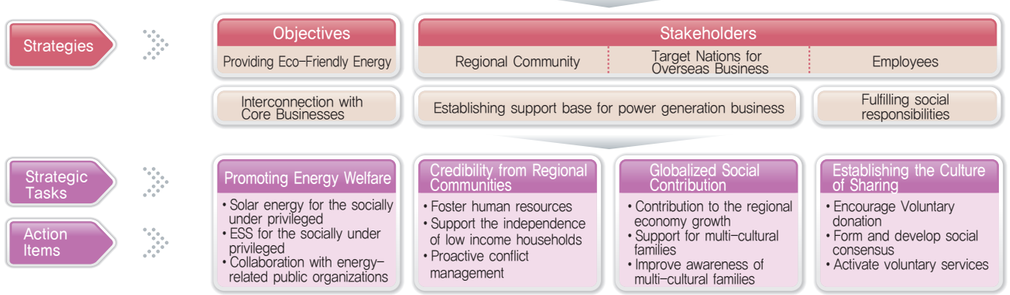
❖ Hope Connection Emergency On-site Service Group

- Prepared for the demand for urgent voluntary service including natural disasters.
- Composed of 124 members in total at the head office and each workplace.
- Signed agreements with the fire stations in each area.

Implementation System & Finance for Social Contribution Activities

:: Implementation System

With the slogan of "A Hand of Love, A Light of Hope", EWP organized a voluntary service group on Feb. 2004, which has 2,231 members and 103 teams in total as of 2013. The Social Contribution Committee works for systematic voluntary service, and the "Hope Connection Emergency On-site Service Group" is ready for the demand for urgent voluntary services in connection with the fire stations in each area.



:: Finances

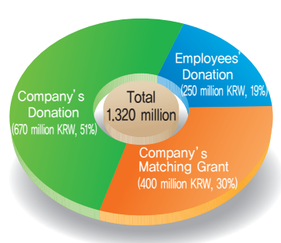
The fund for the voluntary service activity is raised by deducting a certain amount of money from the salary of employees and the company's donation of the same amount of the money as is collected by employees in a matching grant system. The voluntary service teams are conducting services every year with the funds. Apart from the finances inside the company, the budget for the projects intended to support the local community is spent for the education and cultural activities in the area adjacent to the power plant according to the Law on the Support for the Areas near the power plants.

❖ 2013 Budget for Regional Community Support Projects

Unit: million KRW

Classification	Dangjin	Ulsan	Honam	Donghae	Ilsan	Total
Support Fund	2,167	626	163	203	100	3,259

❖ Sources of 2013 Social Contribution Fund



Promoting Consensus on Power Generation Business

:: Support for Energy-Vulnerable Groups

Through 'Sharing Sunshine, Hoping Electricity Project,' EWP provided the energy vulnerable groups residing in the vicinity of its plant sites with fundamental and permanent solutions by supporting installation and operation of eco-friendly, permanent photovoltaic power generation systems. Also, EWP has contributed to distribution of environmentally-friendly energy for the low-carbon green growth. Moreover, EWP has implemented a new energy welfare project utilizing ESS battery technology and support heaters not only to help the energy vulnerable groups, but also to reduce the energy consumption during winter.

Sharing Sunshine, Hoping Electricity Project (at Dangjin)

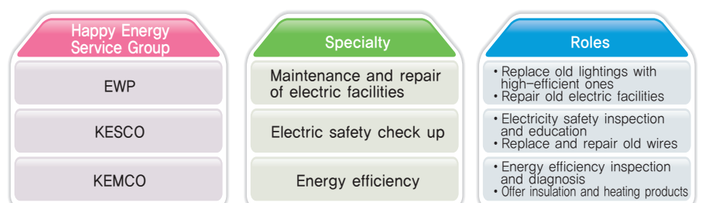
Sharing Sunshine, Hoping Electricity Project (at Ulsan)

❖ Completion of Photovoltaic Power Plant Construction

Location	Facility	Capacity	Completed
Ulsan	The elderly nursing facility	10kW	9.13
Dangjin	Welfare facility for the disabled	12kW	10.22
Donghae	Local center for children	10kW	12.16

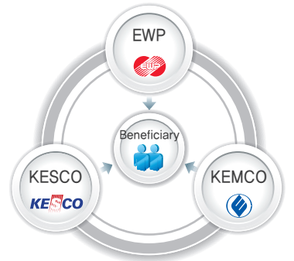
:: Energy-Related Public Companies' Collaboration for Energy-Vulnerable Groups

EWP established 'Happy Energy Service Group' with Korea Energy Management Corporation (KEMCO) and Korea Electrical Safety Corporation (KESCO) to provide supports welfare of the energy-vulnerable groups. They plan to integrate the safety, energy efficiency and facility repair services separately operated, so that the services can be offered in a centralized manner and the satisfactory of beneficiaries can be maximized. EWP has inspected and repaired old electric devices and facilities, and replaced outdated lightings to high-efficient ones.



:: Support for the Households Damaged by Electric Accidents

As an electric power generation company, EWP is supporting those who were damaged by electric accidents such as electric shock. The company has provided caregivers for those who were burned by electric shock. EWP is also granting scholarships to the students of the households which were damaged by electric accidents.



❖ Partnership Agreement for Social Contribution

Supporting people damaged by electric accidents

- Bestian Medical Foundation for Burn Support (3,000,000 KRW)

Scholarships for students of damaged families (half-yearly)

- 2 high school students (400,000 KRW) and 1 undergraduate(600,000 KRW)

Sponsoring Educational, Cultural and Recreational Activities

:: Implementation of Educational Projects

EWP is making much effort for the education and training of human resources near its power plants. To improve the educational environment near the power plants which lags behind urban areas, learning apparatuses such as video presenter and lockers and storage closets are donated every year to improve the learning environment. As a result, the students at schools near the power plant now enjoy a learning environment comparable to that of the schools in other areas. Tuitions are supported for the students from elementary school to university living in the neighborhood of the power plants to relieve their burdens and encourage learning so as to foster local talents. Also, to provide the opportunity for special learning in addition to regular classes, native English teachers are provided to become friendly with English in this global era, and the opportunities for the tour of the national museum and historical and cultural sites are provided for live learning through experience. Furthermore EWP has joined the 'Love Fence' movement of the government to break the vicious cycle of poverty for children of needy class to be able to have proper education. A total of 18 local children's centers are supported so that the children can be offered enough education opportunities.

Area	Supporting Funds(million KRW)
Educational Apparatus	300
Scholarship	1,000
Special Learning	100
Others	600
Local Children's Centers	100
Total	2,100

Scholarship presentation

Summer Book Camp

:: Sponsoring and Regional Cultural Activities & Holding Participatory Cultural Events

As a part of the corporate's cultural support policy, EWP has supported the traditional and cultural activities of communities nearby its plant sites. Examples are Sunrise Festival and Sangrok Cultural Festival in Dangjin and Literature Award in Ulsan. Through the cultural sponsorship EWP has contributed to the growth of the regional cultures and the increased bond of the communities. Also, EWP invited blinded orchestra to the regional communities, which in result encouraged participatory communication and supported the handicapped groups.

Area	Culture & Arts	Sports Promotion	Total
Activities	46times	48times	94times
Participants	303	68	371
Supporting Funds (million KRW)	500	400	900

Tug-of-war Festival in Giji, Dangjin

Hopeful Energy Concert

Partnership for Co-prosperity with Communities

:: Supporting Infrastructure Development for Communities

In accordance with the national laws, the areas in the vicinity of power plants are beneficiary of a government subsidy. The subsidy is allocated depending on the power generation outputs of the year and is given to the municipality annually. In 2013 alone, 15.4 billion won were given to local governments and covered the costs of the projects to increase the income of the residents and expand public facilities.

❖ Amount Allocated for Community Support by Each workplace in 2013 Unit : million KRW

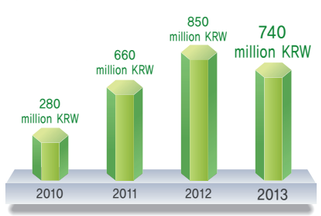
Classification	Dangjin	Ulsan	Honam	Donghae	Ilsan	Total
Supported Amount	9,221	4,242	671	844	440	15,418

Movement to Revive Traditional Markets

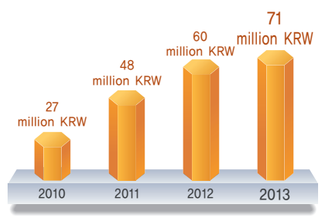
:: Reactivation of Traditional Markets & Direct Trading of Agricultural Products

EWP is making efforts to activate local economy for co-prosperity with the community fulfilling its responsibility as a corporate citizen. Each power plant signed for a sister relationship agreement with a traditional market near it. In 2013, employees of EWP bought gift certificates of traditional markets worth 740 million won, and EWP is encouraging its employees to use traditional markets by holding events to visit the markets. In addition, there is a homepage for direct transaction of agricultural products being operated in EWP's homepage to purchase the agricultural products produced near the power plants. It provides the farmers with a stable sales route at reasonable prices and enables the employees to buy good agricultural products in trust achieving win-win relationship beneficial to both parties. In 2013, 119 items worth of 71 million won were purchased, which has been increased by 18% from the previous

❖ Total Sales of Onnuri' Gift Certificates



❖ Total Purchase in East West Market



Direct Transaction of Agricultural Products at EWP

:: Environmental Protection Activities in the Areas near Power Plants

EWP is minimizing the impact on environment with an eco-friendly management, and furthermore taking lead in the preservation of the natural environment in the areas near power plants to leave a clean environment to posterity. Each power plant is conducting regular environment conservation activities through '1 company 1 mountain' and '1 company 1 stream' movement, and environmental campaigns including the drawing contest for environmental painting are regularly held to promote awareness of the importance of environment among children.

Classification	Sister Relationship	Number of Activities	Number of Participants	Supported Amount (thousand won)
Cultivating Green Mountains and Streams	13 mountains and streams	18	628	15,550
Environment Protection Activities	–	72	690	807

Voluntary Service for Sharing

:: Sponsoring Child Breadwinners, Singled Seniors

The voluntary service teams at each EWP power plant made sisterhood relationship with the child heads of household and the elderly who have no place to turn to living near the power plant to support with daily necessities, preparing learning materials, cleaning the house and keeping company with them. In addition, to take care of those who have difficulty in moving among the extremely poor class in the neighborhood of the power plant, caregivers are hired to help the patients lead at least the minimal human life.

❖ Sponsorship for Vulnerable Social Groups in 2013

Programs	Sisterhood Relationship (person)	Number of Activities (times)	Number of Participants (person)	Supported Amount (million won)
Sponsorship for Child Breadwinners	79	881	549	119
Sponsorship for Singled Seniors	75	428	424	95
Caregiver Support	22	–	–	43
Total	176	1,309	973	257

❖ Sponsorship for Welfare Facilities in 2013

Facilities	Number of Activities (times)	Number of Participants (person)	Supported Amount (million won)
Composite Welfare Facilities	114	798	188
Children's Facilities	42	821	33
Facilities for the Seniors	66	733	32
Facilities for the Handicapped	74	336	25
Total	296	2,688	278

Birthday Party for the senior people


Service for Welfare Facilities

:: Love Blood Donation Relay and Other Voluntary Service Campaigns

In every May since 2004, EWP circulates its workplaces beginning with the head office in the shape of a heart to have a blood donation campaign. 240 employees participated in the 10th blood donation relay held in 2013 to practice their share of love. In 2013 alone, the accumulated number of employees who have participated in the relay amounted to 2,673. Also, EWP sponsored sight recovery operation for 20 people in collaboration with Light of Hope, the company-sponsored voluntary service group.

:: Helping Socially Vulnerable Groups through Supporting Social Enterprises and Female-owned Businesses

What is most needed for poor people is not mere kindness but helping them work for their economic reliance. EWP has supported facility investment for social enterprises, and sponsored education and employment programs for the vulnerable groups. In 2013 alone EWP purchased products and services amounting to 2.8 billion won from social enterprises and 15.6 billion won from female-owned businesses.

Classification	2011	2012	2013
Purchase from female-owned businesses	9.4 billion KRW	11.2 billion KRW	15.6 billion KRW
Purchase from social enterprises	0.6 billion KRW	2.8 billion KRW	2.8 billion KRW

Globalized Social Contribution Activities in Collaboration with Overseas Businesses

:: Voluntary Service Programs Interconnected with Overseas Business Activities

In collaboration with municipalities, academic organizations, EWP has been active in providing social contribution activities utilizing regional growth models based on the Saemaul Campaign, aiming to establish a growth foundation of the target nations of its overseas business, improve the awareness of natives, and foster human resources. EWP selected 2 scholarship students from Jamaica, where EWP has operated a nation-owned electricity enterprise (JPS). The students will take courses at the Park JeongHee Graduate School of Politics of Youngnam University in Daegu, Korea for 18 months from January 2014. EWP also established JPS Foundation in 2013 which provides financial aids and free feeding service to schools in underdeveloped regions in Jamaica, while organizing and managing mentoring programs and partnership programs for the local communities.

EWP also has a plan to expand this program to include other underdeveloped or developing countries such as Haiti and Indonesia.

On the other hand, In U.S, where EWP operates a biomass and natural gas plant, EWP has donated for the regional fire-fighting authorities and offered voluntary fire-fighting services and thus contributed to the local community.


Voluntary Service by JPS Foundation


Voluntary Fire Fighting Service in U.S.


EWP
invites Applications for
2 Postgraduate Scholarships
leading to Masters Degrees at Youngnam University in Daegu, Korea.
The scholarship is part of EWP's support for Education and Community Development in Jamaica.
Applicants must be Jamaican with a University first degree or equivalent.
The Course Term: 18 months.
12 months for Course Work and 6 months for writing thesis starting January 2014.
The Scholarship covers full Tuition, Air Travel to and from Korea and living expenses of about J$100,000 per month.
The Department of Study is "New Village Project and International Development."
Preference will be given to persons who wish to pursue a career in Public Administration and Community Development.
Send applications for review by November 13, 5 p.m. to scholarships@jpsfoundation.com
Recruit Notice for EWP's Scholarship Program

Green Company Coexisting with the Nature

Having promoted a Green Management System through constant improvements of green technology infrastructures, EWP is a leading green company who has been and will be protecting the nature clean and rich.

Eco-Friendly, Green Management

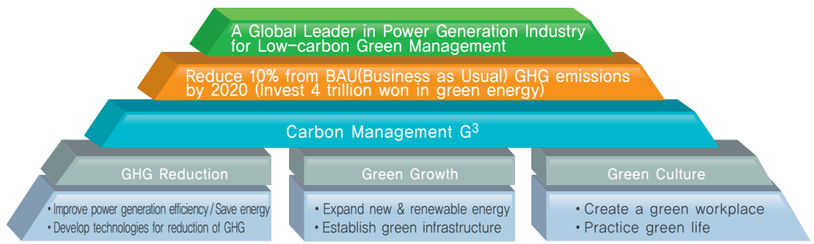
- Green Management System
- Climate Change Adaptation
- Efforts to Minimize Environmental Impacts
- Managing Environmental Risks
- Protection of Biodiversity

Green Management System

Green Management Implementation System

:: Vision of Green Management

With the legislation of the Framework Act on Low Carbon Green Growth, EWP has revised its Green Management Master Plan in 2010 to promote reduced greenhouse gas emission, green growth, and increased awareness of green culture.



:: Implementation System for Green Management

Recognizing the importance of coping with climate change for sustainable growth of the company, the top management of EWP is implementing systematic low-carbon green management by organizing a department exclusive for green management both at the head office and each workplace. Also, the Green Management Committee has been installed to secure the development possibility of the overall company including low-carbon green management. The committee is holding a meeting periodically for the consultation and debating of internal and external experts.

❖ Roles & Responsibilities

CEO(President)	Creative Environment Team(Dept. in Charge)	Dept. in Charge of Green Management at Workplaces
• Establish the policies for green management	• Supervise green management. Set up implementation strategies and master plan. • Establish the mid-long term environmental protection plan • Prepare greenhouse gas emissions trading • Support and monitor green life activities. • Accept needs of the performers. Excavate and spread good examples • Check practices in 5 sites	• Implement GHG-energy target management and environmental laws such as Clean Air Conservation Act • Practice green management of the workplace • Promote practice of green life • Spread good examples inside and outside the company and support the activities of the department in charge

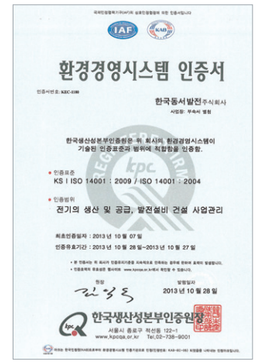
Top-Tier Green Management System

:: Certified Environmental Management System

For competitive and distinguished environmental management, EWP has acquired ISO 14001/9001 certificate and the Green Company designation from the Ministry of Environment Korea. Through continuing promotion of environmental innovation and enhancement on the environmental management system, EWP still stays to be an ISO 14001/9001-certified company.

❖ Environmental Certificates

Classification	Scope	Validity	Authority	Remarks
ISO 9001/14001	EWP's all business locations	'13.10.28 ~ '16.10.27	Korea Productivity Center	
Green Company Designation	Ilsan Plant	'12.07.27 ~ '15.07.26	Ministry of Environment Korea	※ Ilsan plant is the first domestic plant that has been designated as Green Company for 5 years consecutively.
	Honam Plant	'10.04.14 ~ '14.03.31		
	Donghae Plant	'10.04.14 ~ '14.12.28		
	Ulsan Plant	'12.12.20 ~ '15.12.19		



:: Performances of Environmental Management System

In 2013, EWP won awards both in environment and new growth sectors and thus gain credit for what it has achieved in environmental management. As acclaimed especially high with its unique green management system, world-class plant project such as #4 at Ulsan and unit #9 and 10 at Dangjin plant, and its R&D on GHG capture and high value compound production technology development, EWP won the best award(Citation from Minister of Trade, Industry & Energy) in the Green Technology Sector at 2013 Korean New Growth Management Award. And EWP also won the best award(Citation from Minister of Environment) in the environmental energy sector at 2013 Korean Health & Environment Award as being recognized of the contribution of renewable energy to spread and the efficient use of resources through the biomass power generation using the domestic waste resources.

Korean New Growth Management Award in 2013

:: Enforcement of Environmental Information Disclosure System

EWP has disclosed its corporate information on environment management in accordance with the Environmental Information Disclosure Regulation which was enforced firstly on public organizations and green enterprises in 2012. EWP also added complement reports (14) including new/renewable energy and GHG emission status quo to its environmental report, in addition to compulsory reports (13) including environmental pollutant status, environmental compliance performance.

Environmental Information Disclosure Items.

Category	Classification	Disclosure Items.	Compulsory /Voluntary
About Enterprise	Business Overview	Industry, Products, Sales, Production, Employees, Domestic and Overseas Projects, Department in Charge of Green Management	Compulsory
	Awards & Agreements Related to the Environment	Green Company, Environmental Management Award, Voluntary Agreement of Waste Reduction and Purchases of Green Products	Voluntary
Strategy/Green Management System	Green Management Strategy & Environmental Policies	Vision, Strategy, Policy, Object for Prompting Green Management	Voluntary
	Establish Green Management System	Roles & Authority of the Department in Charge of Green Management, Emergency Response Process Compulsory	Compulsory
Resources /Energy	Management of Materials, Water, Energy	Materials, Water, Energy Reduction and Introduction of technology	Compulsory
		Materials Usage and Usage Intensity	Compulsory
		Water Usage and Usage Intensity, Recycle	Compulsory
		Energy Usage and Unit Intensity	Compulsory
	Management of New & Renewable Energy	Introduction of technology and Investment for New & Renewable Energy	Voluntary
GHG/ Environmental Pollution	Management of GHG	Introduction of technology and Investment for GHG Reduction	Voluntary
		GHG Management Level and Emissions	Voluntary
	Management of Environmental Pollutants	Introduction of technology and Investment for Minimizing Environmental Pollutants	Compulsory
		Status of Pollutant Management Facilities and Monitoring System	Compulsory
		Air Pollutant Emissions and Intensity	Compulsory
		Water Pollutant Emissions and Intensity	Compulsory
		Waste Produced and Recycled	Compulsory
		Chemicals Usage and Intensity	Compulsory
		Management of Soil, Noise & Vibration, Odor	Voluntary
Green Product /Service	Purchase of Green/Service Development and Marketing	Introduction of technology and Investment for Green Product and Service	Voluntary
		Eco-friendly Designs of Green Product and Service	Voluntary
		Status of Product certified by Third Parties	Voluntary
	Purchase of Green Products and Cooperation between Enterprises	Operating Guidelines for Purchasing Green Products	Voluntary
		Managing Environmental Information for Partners and Environmental Assessment	Voluntary
		Support of Environmental Technology and Training	Voluntary
Society /Ethical Responsibility	Compliance Status of Environmental Regulation	Status of Violation of Internal and External Environmental Laws	Compulsory
	Environmental Information Disclosure	Status of Publishing Sustainability Report	Voluntary
		Corresponding to Environmental Information Request from Stakeholders	Voluntary

:: Active Purchase of Green Products

Meeting the government's recommendation on the purchase of green products, EWP is implementing the system of compulsory purchase of green products. A green product means a product which can save resources or reduce environmental pollution which has been certified for environmental mark or good recycling (GR) by the Ministry of Environment. In 2013, green products accounted for 98.6% of overall product purchase, which was amounting to 3.68 billion won.

:: Greenhouse Gas Mentoring Project Led by the Ministry of Trade, Industry & Energy

EWP is the first public enterprise who participated in the Energy Project for Large/Medium/Small Enterprises led by the Ministry of Trade, Industry & Energy for two consecutive years. This cooperation project is planned to share and distribute energy management know-hows of large enterprises to SMBs. Through this project, EWP has implemented energy management diagnosis on its five SMB partners and supported their energy saving activities.

❖ Overview of GHG Mentoring Project

Discovery & Energy Efficiency Diagnosis
- Investigate energy-related situations and status as well as management levels
- Perform energy efficiency assessment and draw improvement strategies

Expected Effects
- Improve SMBs' awareness of GHG management
- Derive potential GHG reductions

* Mentor : GHG managers at EWP
* Mentees : KG ETS, Sampyo FA, JTech, Ikseong Tech

:: Nurturing Human Resources to Lead Green Growth

EWP continues to conduct professional education in each area to implement low-carbon green management such as coping with climate change and the development of new & renewable energy and related businesses. In-depth educational courses are provided to foster experts in related fields and at the same time on-line educations are offered to all employees to form a consensus on green management. Especially, in 2013 staffs in charge of green growth business participated in GHG target manager training programs to enhance the corporate's collective responsiveness and readiness against climate change.

❖ Green Management Education Programs

Sectors	Education Programs
Climate Change Adaptation	Overseas education for emission trading system
	License for emission traders
	Education on implementation of GHG target management system
	In-house online education for climate change adaptation
Environmental Management	Education on the operation of environmental pollution prevention facilities, etc.
	Statutory education for environment managers
New/ Renewable Energy	Energy generation technologies and project management
Experts Nurturing	Master and doctoral courses at graduate schools

:: Investments on Environment Sector

EWP has consistently made investments on environment sectors such as environmental installation and operation and environmental technology development to minimize environmental impacts.

(Unit: billion KRW)

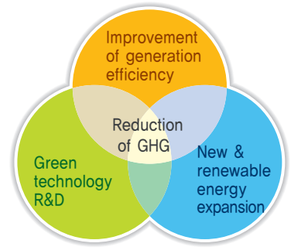
- Environmental Installation : Including expenditures for installation of environmental facilities, environmental improvement investments, etc.
- Environmental Facility Operation : Including electricity fee, drugs, labor costs for operation of environmental facilities, waste disposal costs, etc.
- Environmental Technology Development : Including R&D investments, etc.

Climate Change Adaptation

Performances in Climate Change Adaptation

:: GHG Reduction Goals & Current Emissions

Due to the characteristics of the power generation sector, its GHG emission depends on the nation's electricity demand and power mix and there can be no inventory. So it is more reasonable to set a goal for reduction with GHG emissions intensity. EWP's emission goal is to reduce its GHG emission up to 10% from the BAU (average emission for three years from 2007 to 2009) by 2020.
Total GHG emission in 2013 were 43,208 kilo tons-CO_2, with direct emissions of 43,121 kilo ton-CO_2 and indirect emissions of 87 kilo tons-CO_2.
Unit emission was 0.7746 ton/MWh. EWP is doing best to reduce the unit emission through improving efficiency of power facilities and introducing new/renewable energy.



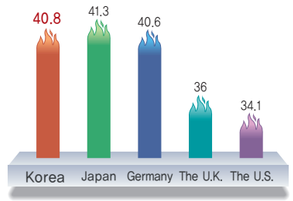
❖ EWP's GHG Emissions

Classification	Type	2011	2012	2013
Emissions (ton)	Scope 1	41,377,486	44,107,078	43,120,844
	Scope 2	57,678	67,144	87,146
	Total Emissions (including HQ)	41,435,164	44,174,222	43,207,986
GHG emission unit (ton/MWh)		0.810	0.804	0.7746

:: World-Class Efficiency of the Power Plant Facilities

EWP's power plants are mostly furbished with new and cutting edge facilities with world-class operation capabilities. This is why they can maintain the highest plant efficiency, which results in the less GHG emissions. Especially, Dangjin Power Plant Units #1~8, which take 58% of all the power generation capacity of EWP with 4,000MW in total, were completed between 1999 and 2007 and have the world's highest efficiency among coal plants. In addition, the Ulsan Combined Heat and Power Plant Unit #4(871.9MW) will be completed in 2014 with 55% of plant efficiency. The Dangjin Power Plant Units #9 and #10 will be completed in 2015 and 2016, which will upgrade the overall plant efficiency of EWP with a super large new concept power generation facility similar to a nuclear power plant.

❖ Plant Efficiency of Coal-fired Power Plant(%)



:: Disclosure of GHG Emission through Carbon Information Disclosure Project

Ever since the first issue of the carbon management report in 2010, EWP has published the report for 3 years in a row for the first time to disclose EWP's greenhouse gas emission information and to inform EWP's effort to deal with climate changes to its stakeholders. In addition, EWP joined spontaneously in an international climate change response project, the Carbon Disclosure Project, for the first time as a public enterprise and as an information-unrequested company. The Carbon Disclosure Project is being implemented in 60 countries and supported by international financial agencies, such as Goldman Sachs. In Korea, 250 listed companies are required the information disclosure. EWP, as an unlisted enterprise, is not requested to disclose the relevant information.

GHG Reduction & Relevant Technology Development

:: Securing GHG Emission Credits

EWP is pursuing a CDM project and a national GHG reduction registration project as a part of GHG reduction activities. The Photovoltaic Project of Donghae Power Plant was registered in the UN CDM for the first time in the world as a photovoltaic sector, and a small hydro-power generation project in Dangjin was also registered in the UNCDM in August 2009 for 5MW which used to be the largest as one unit of facility. As for the national GHG reduction registration project, a high-voltage inverter was installed in Honam Power Plant in May, 2007, which was followed by registration of new technology development by Dangjin Coal-Fired Plant in September, 2008. HRSG Waste Heat Recovery of Ilsan CHP Plant and GT Waste Heat Recovery of Ulsan Power Plant were registered in 2009. The Fuel Cell of Ilsan CHP was registered. The Hybrid SCR of Ulsan Power Plant was registered in 2011.

Category	Title of Project	Certified Reduction (ton/year)	Registered
CER	Donghae Photovoltaic (1MW)	690	2006. 8
	Dangjin small hydro-power (5MW)	15,000	2009. 8
KCER	Honam high-voltage inverter	7,917	2007. 5
	Dangjin new technology generation	56,667	2008. 9
	Ilsan HRSG Heat Recovery	52,653	2009. 10
	Ulsan GT Heat Recovery	5,547	2009. 11
	Ilsan fuel cell 1st stage	6,476	2010. 4
	Ilsan fuel cell 2nd stage	7,216	2011. 9
	Ulsan Hybrid SCR	5,183	2011. 12
VER	Ulsan #4 Combined	1,060,000	2014. 5(E)
Total		1,217,349	

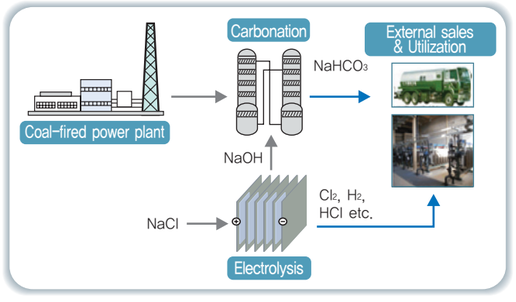
:: Continued Implementation of GHG Reduction Projects

Under the Negotiated Agreement for GHG emissions that came into effect in 2011, it is impossible for a company which was assigned a goal of reduction to register a new KCER project. Also, the uncertainties in the global carbon market is increasing including the decreases in the prices of carbon credits, and the merits of CDM project have virtually disappeared as the registration of new CDMs in the EU emission trading scheme from 2013 is only applied to the poorest nations. However, apart from such uncertainties, EWP continues to find out the projects to reduce GHG and making efforts to fulfill its green goal successfully. Especially, the old Ulsan Heavy Oil Thermal Power Plant is being replaced with a new Combined Heat and Power Plant to reduce about 1,060 kilo tons of GHG emissions.

:: Investment on Climate Change Adaptation R&D Initiatives

In preparation for the increasing pressure of the international society to reduce GHG according to IPCC, EWP will invest regularly on the R&D related to cope with climate change. Through such investment, EWP will continue to secure the high technology for the reduction of GHG. Especially, in cooperation with other power generation companies, EWP has concentrated its capabilities in a collaborative carbon capture and storage(CCS) R&D projects, and carried out its own R&D projects on NCCU(Non-capture carbon utilization). Non-capture technology requires no physical capturing of CO_2 and thus allows users to reduce the cost by 24%. It also highly profitable as it can convert CO_2 to high value compounds and requires no CO_2 storages or containers, which is an optimal solution for countries including Korea that have relatively limited land spaces.

❖ GHG Conversion Technology Generating High Value Compounds Using CO_2



※ GHG Conversion Technology Generating High Value Compounds Using CO_2

A new original technology to convert the emissions from the plants to sodium bicarbonate ($NaHCO_3$), sodium hypochlorite(NaOCl), and hydrochloric acid(HCl).

:: Encouraging Mix-Use of Biomass with Coal Fuels

As a core short-term strategy to achieve the nation's goal in reduction of GHG, EWP is actively implementing co-firing of biomass. A test in Donghae Coal Fired Power Plant for burning in mixture with wood chip, wood pallet and RDF (Refuse Derived Fuel) successfully completed and the amount of such fuels will be expanded. For Dangjin Coal Fired Power Complex, the organic solid fuel, which is treated at the sewage treatment facility of the local government, and bituminous coal are used in co-firing.

❖ Characteristics of Diverse Biomass Fuels

Item	Wood			Organic Solid Fuel	SRF
	Wood Chip	Pellet	PKS		
Shape					
Characteristics	Forest by-products, waste wood	Dry and shape wood	Cocoa husk, seed, etc.	Dry and carbonize sewage sludge	Litter dry carbonized
LHV (kcal/kg)	2,500~3,500	3,500~4,500	4,000	3,000~3,500	3,500~4,500
Power Plant	Donghae	Donghae	Under consideration	Dangjin	Under consideration

:: Successful GHG-Energy Target Management

EWP is one of the companies that are given their target energy goals in accordance with the Energy Target Management System, where the government sets the limitations on the GHG emission and energy consumption of target companies, and then monitors and manages the progress and status. EWP has actively participated in this regulatory practice, while forming its own response system to minimize the impacts that may occur upon the enforcement of emission trading schemes. To comply with the Energy Target Management rules, EWP has prepared fact sheets on the company's energy consumption from 2007 to 2012. The report has been reviewed by an accredited verification authority, and was finally submitted to the Greenhouse Gas Information Center, an agency run by the Ministry of Environment Korea. In 2013, EWP's total GHG emission was amounting to 0.7746 ton/MWh, which is lower than the limit (0.799 ton/MWh).

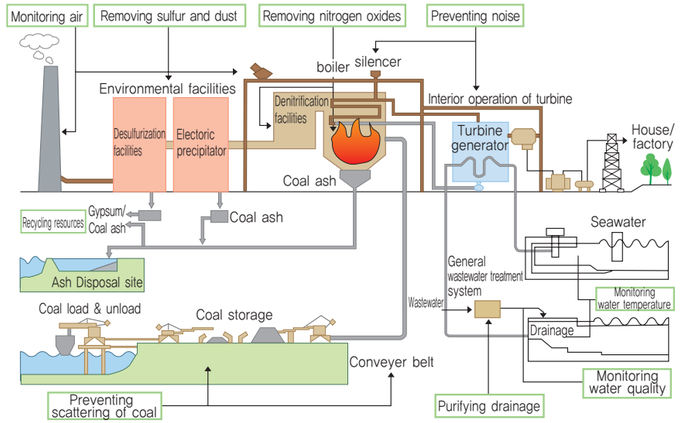
:: Implementation of Phased Emission Trading Scheme

EWP joined with other power generation companies and the Korea Power Exchange on business cooperation for simulated emissions trading scheme to actively and jointly respond to the IPCC. Also, according to the EWP action plan, EWP, for the first time as a generating company, performed a simulated emissions trading scheme with SK Group in October, 2010. In 2012, EWP participated in the test trading supervised by the Ministry of Trade, Industry & Energy in preparation for the compulsory emissions trading system which will begin in 2015.

Efforts to Minimize Environmental Impacts

Power plants are producing electricity using coal, heavy oil and LNG. It is inevitable that various environmental pollutants are emitted according to the consumption of the fuel for power generation. However, EWP is minimizing pollutants by operating state-of-the-art facilities that can reduce environmental pollutants and by recycling wastes, and therefore, to contribute to sustainable development of our society.

❖ Environmental Pollutant Treatment Process



Fuel for power generation	Bituminous coal	15,825 thousand tons
	Anthracite coal	208 thousand tons
	Heavy oil	1,601,895kℓ
	LNG	1,589 thousand tons
Power generation water	13,761 thousand tons	
Limestone	359 thousand tons	
Magnesium hydroxide	50 thousand tons	
Chemicals	15 thousand tons	
Air emissions	SO_X	16,629 tons
	NO_X	31,916 tons
	먼지	723 tons
	CO_2	43,121 thousand tons
Water emissions	COD	33 tons
	SS	1.6 tons
	T-N	61.7 tons
	T-P	1 ton
Output	Power generation Quantity	56,826 GWh
	Power transmission Quantity	54,066 GWh
By-product	Coal Ash	
	Desulfurization Gypsum	

:: Management of Air Pollutants

Air pollutants generated in power plants can be largely divided into sulfur oxides, nitrogenous oxides, and dusts. EWP is doing its best to reduce the amount of the mission of pollutants by operating cutting-edge air pollutant prevention facilities such as desulfurization, denitrification and dust-collecting facilities while enforcing pollutant regulations which are stricter than the statutory emission requirements.

❖ Air Pollutant Treatment Facilities in Place

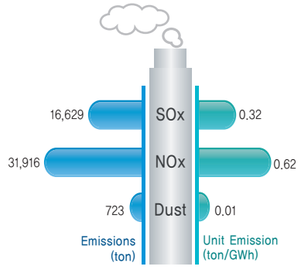
Power Plant	Desulfurization facilities (to remove sulfur oxides)		Denitrification Facilities (to remove nitrogen oxides)		Dust Collector (to remove dust)	
	Units installed	Type	Units installed	Type	Units installed	Type
Dangjin	8	Wet limestone-gypsum method	8	SCR	8	Electric Precipitator
Ulsan	3	Wet limestone-gypsum method	3	SCR	6	Electric Precipitator
			3	SNCR		
Honam	2	Magnesium hydroxide method	2	SCR	2	Electric Precipitator
			2	SNCR		
Donghae	2	Desulfurization in a dry furnace	–	–	2	Electric Precipitator

※ SCR : Selective Catalytic Reduction, SNCR : Selective Non-Catalytic Reduction

❖ Allowance of Air Pollutant Emission & Concentration

Plant	SOx		NOx		Dust	
	Emission (ppm)	Concentration (ppm)	Emission (ppm)	Concentration (ppm)	Emission (mg/Sm^3)	Concentration (mg/Sm^3)
Dangjin	100	23	150	76	30	5
Ulsan Steam	180(#1~3) 150(#4~6)	141 79	250(#1~3) 150(#4~6)	156 138	30	4 6
Ulsan Combined	–	–	100	50	–	–
Honam	100	54	150	120	40	4
Donghae	150(#1~2) 50(#3)	77 23	150(#1~2) 70(#3)	51 34	40(#1~2) 20(#3)	5 4
Ilsan	–	–	100	49	–	–

❖ Atmospheric Emissions



:: Service Water and Recycling Waste Water

The service water used at a power plant is supplied from the river and dam near the workplace. It is used for the water supply for boilers, cooling water for machines, desulfurization of facilities and other potable water. A general wastewater treatment system, which treats the wastewater in physical and chemical ways, is installed at every power plant. The wastewater is reused for process water or discharged into the sea, at a level of the standard water quality for discharged water. EWP is making efforts to solve the problem of water shortage by reducing the amount of wastewater or raise the percentage of reuse through the application of new technologies to the process of wastewater treatment. In 2013, EWP recycled 1,288 kilo tons of wastewater, which accounts for 36% of the total wastewater generated.

❖ Consumption of Service Water and Recycled Water

Year	Raw Water		Wastewater		
	Consumption (kilo ton)	Unit Consumption (ton/GWh)	Generated (kilo ton)	Recycled (kilo ton)	Recycling Ratio (%)
2011	12,417	236	2,885	1,181	41
2012	14,044	244	3,087	1,222	40
2013	13,761	242	3,598	1,288	36

❖ Water Resources of EWP Plants

Plants	Water Resource
Dangjin Plant	Boryeong dam, Sambong lake
Ulsan Plant	The Nakdong river
Honam Plant	Jooam dam
Donghae Plant	Dalbang dam
Ilsan Plant	The Han river

❖ Allowance of Water Pollutant Emission & Concentration(Unit: mg/liter)

Plant		Region Category	COD		SS		T-N		T-P	
			Allowance	Emission	Allowance	Emission	Allowance	Emission	Allowance	Emission
Dangjin	Power	Type 1	90	4 ~ 5	80	3 ~ 5	60	< 20	8	< 1
	Desulfur			10 ~ 30		10 ~ 20		< 50		
Ulsan		Type1	90	10 ~ 30	80	2 ~ 5	60	< 20	8	< 1
Honam		Type1	40	15 ~ 20	20	3 ~ 10	40	15 ~ 30	4	< 2
Donghae		Type3	130	3 ~ 5	120	1 ~ 3	60	< 10	8	< 1
Ilsan		Type1	40	7 ~ 12	10	2 ~ 3	60	<40	8	< 0.5

:: Recycling Waste Materials and Byproducts

Generally, power plants generate about 30 sorts of wastes to treat. Among those wastes, coal ash, gypsum, and waste oil were recycled, while other waste materials that are not available for recycling are transferred to professional disposal service providers. Also, EWP is doing best to reduce waste disposal costs while promoting recycling through diversifying demands of recycled wastes, supporting R&D on waste issues, and discover new use cases.

❖ Waste Produced & Recycled

Classification	Unit	2011	2012	2013
Power Generation	GWh	53,637	57,653	56,826
Waste Produced	Kilo ton	2,146	2,144	1,839
Unit Waste	Ton/GWh	40	37	32
Waste Recycled	Kilo ton	1,373	1,637	1,857
Recycling Rate	%	64	76	101

❖ Coal Ash & Desulfurized Gypsum Recycled

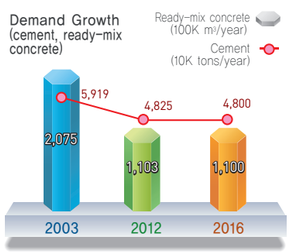
Classification		Unit	2011	2012	2013
Plaster	Recycled	Kilo ton	405	504	557
	Recycling Rate	%	96	97	98
Coal Ash	Recycled	Kilo ton	1,368	1,696	1,829
	Recycling Rate	%	65	80	101
Sales Revenue		100 million won	77.5	64.7	67.3

:: Encouraging Use of Recycled Coal Ash

EWP is making an effort to make a virtuous circle, recycling fly ash, which is produced in coal-fired power plants, as cement material, and EWP is also considering a reduction and recycle plan of bottom ash. For instance, the technology for its complete combustion by putting it back into the boiler will be applied to the design of Dangjin units #9 and #10 to reduce the quantity of bottom ash. Also, to develop new use cases and users of coal fuel to cope with the oversupply of coal expected in 2016, a research project is underway to develop brand new concrete panel product with more than 70% of coal content. The applicability and economic feasibility of this product will be precisely evaluated in 2014 through market survey, pilot installation and production.

※ When coal ash replaces cement completely, it would be possible to reduce CO_2 up to 850kg per ton, which is, when aggregated, able to make a great contribution to GHG emission reduction.

❖ Growth in Production of Coal Ash-related Byproducts



- CO_2 emission from cement : 870kg/ton
- CO_2 emission from coal ash : 14kg/ton

:: Chemical Management

More than 30 kinds of chemicals are used at a power plant for the prevention of corrosion of power generation facilities, pure production and treatment of waste water. To reduce the quantity of chemicals used, EWP has adopted hydrazine-free system, oxygen treatment method, etc.

❖ Chemicals Used

Classification	Unit	2011	2012	2013
Power generation	GWh	53,637	57,653	56,826
Amount of chemicals used	Ton	17,130	15,405	15,424
Intensity	Ton/GWh	0.319	0.267	0.271

❖ Use of Chemicals

Chemicals	Purpose
Hydrochloric acid	pH control, recycling resin
Caustic soda	pH control, recycling resin
Ammonia water	pH control for service water
Anhydrous ammonia	Denitrification
Methanol	Total nitrogen removal
Hydrazine	Deoxidization of service water
Chlorine dioxide	Drinking water

:: Noise and Soil Management

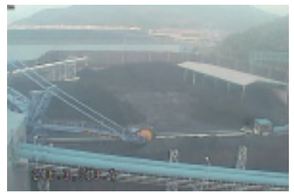
To reduce noise generated in its plant EWP has installed all facilities on premise and has been added silencers and soundproof walls to suppress the noise below the relevant standards. Also to prevent soil pollution by oil leaks, soil pollution investigation is carried out on the areas nearby the oil storages on a regular basis.

Soundproof walls in Dangjin

:: Dust Management

Unloads at piers are monitored using CCTV on a real time basis, and all the monitoring information is communicated throughout the departments in duty and the management to prevent any possible accidents. Coal yards and storages are also monitored using CCTV and the coal quality information and spontaneous combustion characteristics are also managed digitally. Through all of these efforts and systems, EWP is doing the best to minimize the environmental impacts of its business activities on the surrounding areas.

Monitoring status of a loading pier



Monitoring status of a coal yard

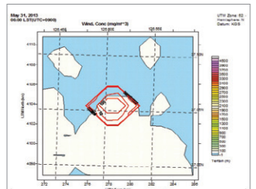
:: Violations of Environmental Laws and Regulations

EWP has no violation of environmental laws and/or regulations claimed during 2013.

Managing Environmental Risks

:: Chemical Management System

To prevent chemical-related safety accidents and provide a safer living environment to the community, EWP has implemented a chemical management system for the first time in public sector. The system integrates systematic chemicals management and accident prevention and response capabilities by offering diverse features including diagnosis of chemicals and dangerous substances, air pollutant atmospheric diffusion simulation, emergency response process and ICT management.



Chemicals Management System and Atmospheric Diffusion Modeling

:: Coping with Chemical and Oil Leaks

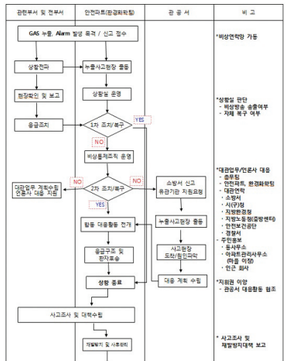
To prevent environmental accidents, EWP has established the procedures of coping with each kind of environmental accident, and is holding exercise for leakage of toxins and oil every year to take prompt measures upon accident. Also, EWP is preparing itself for emergencies by placing a water surface cleaner consigned to Korea Marine Environment Management Corporation. There has been no accident of the leakage of oil, wastes or harmful materials.

:: Enterprise-wide Comprehensive Monitoring System & Pollutant Concentration Measurement Network

All the power plants of EWP are subject to the installation of CleanSYS (a smokestack monitoring system). Environment pollutant emission data collected from the monitoring system is real time transferred to the Environmental Management Corporation's control center in real time. In addition, at Dangjin and Ilsan plants an atmospheric quality monitoring system is operated, so the air quality measurements are collected and disclosed real time. Air pollutant concentration of the Dangjin plant area is also available on the plant official web site.

CleanSYS

❖ Emergency Response Process



Protection of Biodiversity

EWP is making efforts to analyze the effects in the vicinity of the power plants to minimize environmental impact.

:: Environmental Impact Assessment & Post Assessment

Through the environmental impact assessment, EWP analyzes the environmental impact of power plant construction prior to the construction work, and seeks for solution to minimize the impact while complying with the relevant agreement during the construction. In addition, EWP monitors the environment of the areas surrounding its power plant sites during and after the construction, so that the impacts on the surrounding environment and ecosystem can be minimized.

❖ Environmental Impact Assessment

Classification	Assessment period	Examined items
Dangjin #9~10 Environmental Impact Assessment on construction	Aug. 2006 ~ Aug. 2009	Spread of hot cooling water, air quality, noise, soil, marine water and sediment quality, marine ecosystem, agricultural products, land plant, eco-friendly circulation of resources
Donghae Biomass Plant Environmental Impact Assessment on construction	Apr. 2010 ~ Sep. 2011	
Ulsan #4 Combined Thermal Environmental Impact Assessment on construction	Aug. 2008 ~ Jun. 2012	

❖ Post Environmental Impact Assessment

Classification	Assessment period	Examined items
Dangjin #1~8	Jul. 1994 ~ Dec. 2017	Spread of hot cooling water, air quality, noise, soil, marine water and sediment quality, marine ecosystem, agricultural products, land plant, eco-friendly circulation of resources
Dangjin #9~10	2009. 10 ~ 2021. 6	
Donghae Biomass Plant	2011. 12 ~ 2008. 7	
Ulsan #4 Combined Thermal	2012. 6 ~ 2019. 7	

:: Protection of Biodiversity

EWP is making efforts to minimize changes in the ecosystem and to conserve the environment. To practice EWP's love of nature, EWP is carrying out diverse environmental conservation programs including regular nature purification, '1 Company 1 Shore' Cultivation and Feed Wild campaigns.

Campaigns	Sister Relationship	Campaigns Completed	Participants
Purify Mountains & Streams	13 mountains and streams	18 times	628 people
Environment Preservation	N/A	72 times	690 people

Environmental Purification Campaigns

World Leading Energy Company

Creating technology for tomorrow, EWP has led the world energy industry through expanding the power facilities to contribute to the growth of the industry, while constantly securing new, differentiated growth momentums.

Economic Value Creation

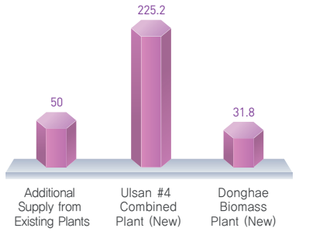
- Stable Electricity Supply
- Future Growth Business
- Overseas Business
- Continuous R&D
- Financial Performance

Stable Electricity Supply

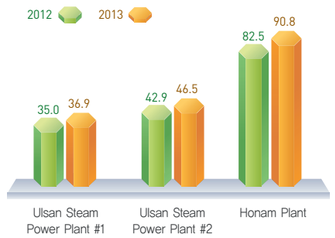
:: Stabilization of Peak Season Power Supply

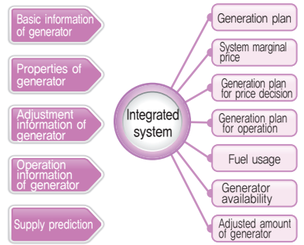
Ever since the rolling blackout at the 15th of September, 2011, EWP has made an utmost effort to stabilize the national electricity supply. To this end, the company has been operating the emergency response plan for power supply and maximizing power supply capability. For stabilization of power supply, EWP also tried to complete the construction of Donghae Biomass Power Plant timely while operating the gas turbine at Ulsan #4 combined plant at a full scale. In addition, the availability of Ulsan and Honam plants has improved by 20%, compared to the previous year, through its timely efforts to replace and repair the aged plant facilities and equipment. EWP also secure additional 244MW capacity through its emergency output increase schemes.

❖ EWP's Contribution to the National Peak Season Power Supply (Unit : GWh)



❖ Usage of Aged Facilities (Unit : %)





:: Integrated Power Generation Forecasting System

EWP has established an integrated power generation forecasting system to actively manage the inventory of fuel. EWP also adopted the flexible power generation schemes where the calorific value is increased when the power consumption is high while is decreased during low season or weekends. In order to fulfill its social responsibility, EWP has largely contributed to stabilizing the nation's power supply during peak seasons, improving the availability and power capacity of old facilities. Moreover, EWP set a good example to cope with nation-wide electricity crisis by establishing an emergency response system and robust collaboration system.

:: Timely Construction of New Power Plants

Dangjin Units #9 and #10(2,040MW) are now under construction to be completed in 2016 by the national demand for expansion of facilities according to the rapid rise in electricity demand. In addition, the superannuated and high-cost Ulsan Heavy Oil Thermal Power Plant (Units #1~3) will be replaced by low carbon, high efficiency Ulsan #4 Combined Heat and Power Plant (871.9MW) whose construction is to be completed in 2014.

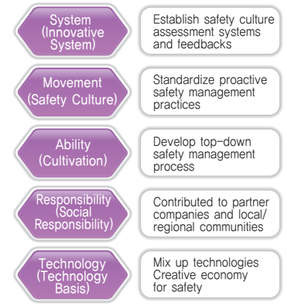
:: Power Plants with Safety as the First Priority

After Fukushima nuclear accident in 11 March, 2011, EWP built mid- & long-term, ICT-based disaster and safety management system and benchmarked international companies, such as MHI and Weir International. As a result, EWP has achieved its goal of No Injury for consecutive 5 years. In addition, EWP is operating various safety management programs, such as 2 Strike Out, Work Stop and Safety Alarm, to prevent negligent accidents similar to recent scaffold collapse accident, electrical fire or toxic material (e.g. hydrofluoric acid) leakage accident in Korea.

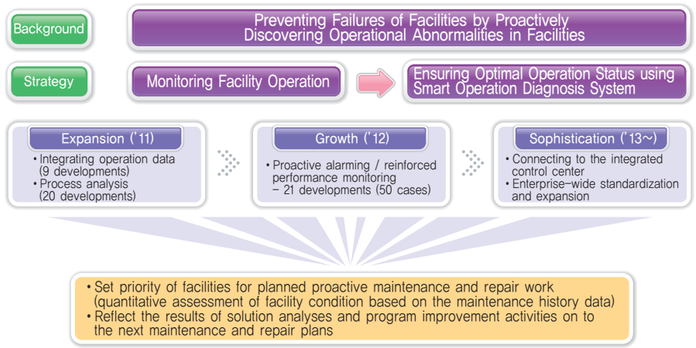
❖ Safety management programs for accident prevention and regulatory compliance

Work Stop	In case of accident, stop relevant working until measures are made.
Safety Alarm	In case of serious accident in other plants, issue an alarm and conduct safety check on relevant working
2 Strike Out	Pick out danger-causing workers with strict personnel transferring

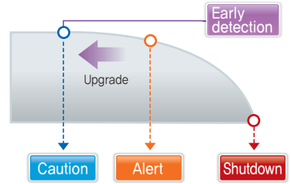
❖ SMART Safety Management System



:: Failure Prevention through Smart Operation Diagnosis Solution

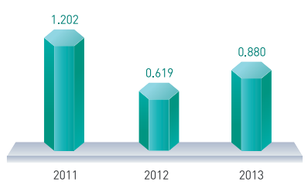


❖ Smart Operation Diagnosis Solution

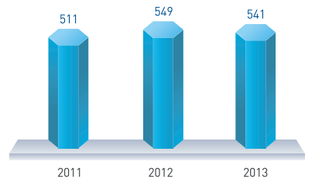


EWP prevents failures of facilities and ensures optimal operation status using a real time operation diagnosis system which compares the data records accumulated in systems with current measurements and analyzes the relationship between trends.

❖ Failure Rate (Unit : %)



❖ Sales (Unit : 100GWh)



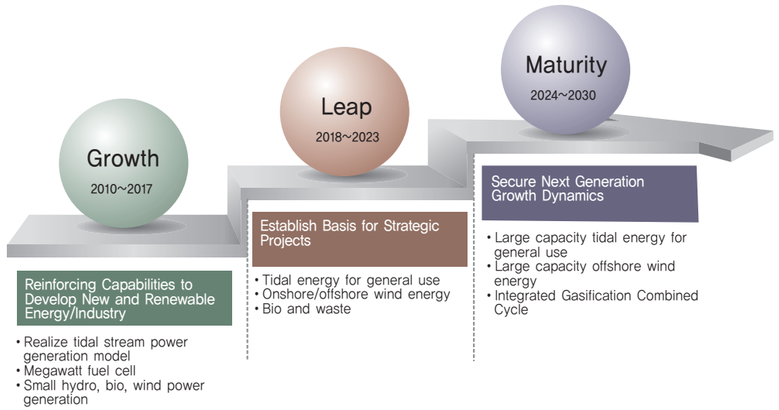
Future Growth Business

Strategy for New & Renewable Energy

Focused development of new and renewable energy sources as a core business to generate growth momentum

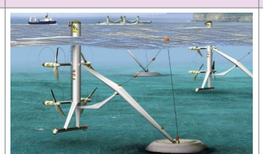
- Energy development focused on mass volume energy sources, Globalization of energy resources
- Select energy sources to focus based on the economic feasibility, accessibility and scale
- Secure global competitiveness in technology satisfying the central government's policy for new and renewable energy

Road Map for New & Renewable Energy Development



:: New & Renewable Energy Development

❖ Major Energy Sources

Photovoltaic Power	Wind Power	Tidal Power	Small Hydro Power
			
Solar cell using photoelectric effects	Converts mill turns to electricity	Using tidal flows (come and go)	Hydro power generation using small dams

Fuel Cell	Biomass	Biogas Turbine	Waste(SRF)
			
Using chemical reaction between oxygen and hydrogen	Using lignocellulosic biomass	Using inflammable gas in wastewater	Using combustible wastes

Major Projects

:: Fuel Cell Facility

The unused space in the precinct of Ilsan Combined Heat & Power Plant was used to construct eco-friendly high-efficiency fuel cell facility units #1~#3 step by step for an operation of 8㎿ facilities in total. EWP is also operating 2.8MW fuel cell facility in Ulsan plant site, which was completed in October, 2013. The heat generated during the operation of the equipment is retrieved to be offered to the nearby consumers at lower prices contributing to the efficient usage of energy. With this facility, EWP will secure an independent technology in fuel cell sector by transferring O&M technology, for the first time among power generation companies. Through this, the company is focusing in securing new growth engines with the development of fuel cell business both home and abroad and advancement into O&M business.

Ilsan Combined Heat Fuel Cell – Phase 1 ~ 3 (8.0MW)

Ulsan Thermal Fuel Cell (2.8MW)

:: Photovoltaic Power Facility

EWP has constructed and is operating high value added rooftop-style photovoltaic power generation facilities without environmental damage by using the existing buildings including the parking lot and roof of warehouse in Donghae Coal Fired Power Plant (1MW), the roof of Dangjin Coal-Fired Power Complex's turbine building (1.7MW), the roof of Dangjin City Waste Landfill Building (1.3MW), and the roof of the warehouse in the container berth in Gwangyang Harbor. As a result, EWP is contributing to the effective fulfillment of the compulsory amount of Renewable Portfolio Standard (RPS). Especially, in the RPS business, EWP has successfully implemented 20MW photovoltaic power generation business at Renault Samsung Motors (i.e. 11MW at the vehicle waiting area, 7.4MW at the plant roof and 1.6MW at the customer parking lot), which is the largest capacity of its kind in Korea. In fact, the roof-type photovoltaic power facility at the vehicle waiting area is regarded as one of successful win-win models of new renewable energy business, preventing newly produced vehicles from discoloration by direct rays. Also in July 2013, world largest floating photovoltaic power generation facility (1MW) was constructed at the Dangjin plant water supply channel, and through this floating plant model, EWP is widely recognized as a leader in floating power plant industry.

Photovoltaic Plant at Shinho, Busan (20MW)

Floating Photovoltaic Plant at Dangjin Plant (1MW)

:: Construction of Wind Power Plants

EWP is focusing on the development of on-shore wind power plants close to the Grid Parity. The constructions of the 1st stage Gyeongju Wind Power Plant (16.8MW), Yeonggwang Jisan Wind Power Plant (3MW) were completed in October, 2012, while Yeonggwang Honam Wind Power Plant (20W) have completed in March, 2014.
Construction projects in progress include the 2nd stage Gyeongju Wind Power Plant (20MW), Honam Baeksoo Wind Power Plant (40MW) and Ulsan Dongdaesan Wind Power Plant (20MW).
In addition, EWP is participating in the large scale wind power project, the construction of 2.5GW offshore wind power plant complex supervised by the Ministry of Trade, Industry & Energy contributing to the technological development for Korean on- and offshore wind power industry. EWP is also fostering professional manpower for the development of wind power business to focus on technological independence and commercialization. And as a result, 3 new renewable energy managers in EWP have achieved WAsP certificates.

1) Grid Parity: A point where the price of the electricity produced by new & renewable energy source becomes the same as the price of the electricity produced by fossil energy.
2) WAsP (Wind Atlas Analysis and Application Program): WAsP is an internationally well-known program that is used in designing wind power plants with the prediction of wind speed and direction. As a wind power plant designing license, the certificate of WAsP started in 2001, and today there are only 197 certificate holders in 30 countries.

:: Bio Energy

Donghae 30MW Woody Biomass Power Plant, the largest capacity of its kind in Korea, using waste woods which are simply buried and the residual materials in forest that are left in the mountains due to the high cost of disposal, is leading the commercialization of green energy. Also, EWP is considering constructions of the world first and largest 5MW bio gas turbine power generation facility that uses food waste effluent in a filled-in ground in the Seoul metropolitan area, 38.9MW Biomass Plant in Seokmun Industrial Complex, Dangjin sewage co-firing facility and Donghae Thermal Biomass co-firing facility to maximize recycling of wasted resources and to comply with the government's Renewable Portfolio Standards (RPS).

Donghae Biomass Power Plant

:: Offshore Power Generation (Small Hydro & Tidal)

EWP has actively promoted the R&D projects with domestic research institutes to improve the technological power of Korea in tidal power generation. A 1MW pilot tidal power plant has been constructed in Uldolmok Waters for the first time in Asia, and a large capacity tidal power plant (14.5MW) is being promoted based on the experiences from the pilot project. In addition, a 5MW small hydro power generation facility has been completed by using the outlet which leads to the sea through a cooling system. A 3MW small hydro power generation facility is under construction as the 2nd stage which is planned to be completed in September 2014 and the development of a 254MW tidal power plant is being promoted for increased utilization of offshore energy resources.

:: Waste Energy

EWP is carrying forward 100MW Samcheok SRF Power Plant, the largest of its kind in Korea, which uses the solid recovery fuel (SRF) produced by recycling of buried and burned waste resources among the combustible wastes occurring in living and workplaces, a 22MW SRF power plant in a filled-in ground in the metropolitan area, a 20MW SRF Combined Heat and Power Plant in Wonju. As a result, EWP creates a composite synergy effect and environmental convenience at the same time.

❖ New & Renewable Energy Projects

Energy Resources	Projects	Completion
Photovoltaic	1.0MW Photovoltaic at Donghae Plant★	2006.09
	1.0MW Photovoltaic at Dangjin Plant★	2010.09
	0.1MW Photovoltaic at Honam Plant★	2011.01
	0.5MW Photovoltaic at Ulsan Plant★	2011.03
	1.3MW Photovoltaic at Dangjin Waste Landfill★	2012.02
	2.3MW Photovoltaic at GwangyangHarbor Industrial Complex★	2011.12
	20.0MW Photovoltaic at Shinho, Busan★	2012.12
	0.7MW Photovoltaic at Dangjin Plant Warehouse★	2012.12
	1.0MW Offshore Photovoltaic at Dangjin Plant★	2013.07
	1.5MW Photovoltaic at Suwon Sewage Plant★	2014.03
	1.1MW Photovoltaic at Hwanggeum Logistics Center in Gwangyang Harbor	2014.06
Wind	16.8MW Wind Power (1stPhase) at Gyeongju★	2012.10
	3MW Wind Power at Jisan, Yeonggwang★	2012.10
	20MW Wind Power at Honam, Yeonggwang★	2014.03
	20MW Wind Power (2ndPhase) at Gyeongju	2014.12
	26MW Wind Power at Daegiri, Gangneung	2015.06
	40MW Wind Power at Baeksu, Honam	2014.12
	21MW Wind Power at Yaksu, Honam	2014.12
	20MW Wind Power at Janggigot, Pohang	2016.12
	20MW Wind Power at Mt. Gadeok, Taebaek	2016.12
	20MW Wind Power at Mt. Wonhyo, Yangsan	2016.12
	20MW Wind Power at Yeomsoobong, Yangsan	2016.12
Offshore Energy	1MW Uldolmok Pilot Tidal Power★	2009.05
	15MW Uldolmok Tidal Power Facilities	TBD
	254MW Tidal Power at Asan Bay	2019.12
Small Hydro	5MW Small Hydro Plant (1stPhase) at Dangjin★	2009.12
	3MW Small Hydro Plant (2ndPhase) at Dangjin	2014.09
	1MW Small Hydro Plant at Donghae	TBD
Fuel Cell	2.4MW Fuel Cell (1st Phase) at Ilsan★	2009.09
	2.8MW Fuel Cell (2nd Phase) at Ilsan★	2011.03
	2.8MW Fuel Cell (3rd Phase) at Ilsan★	2013.02
	2.8MW Fuel Cell at Ulsan★	2013.09
Bio Energy	30MW LignocellulosicBiomass at Donghae★	2013.06
	5MW Biogas Turbine at Incheon	2014.08
Waste Energy	100MW SRF at Samcheok	TBD
	20MW SRF at Wonju	TBD
	22MW SRF at Seoul Metropolitan Area	TBD

(Plants or facilities marked with ★ refers to ones currently in operation.)

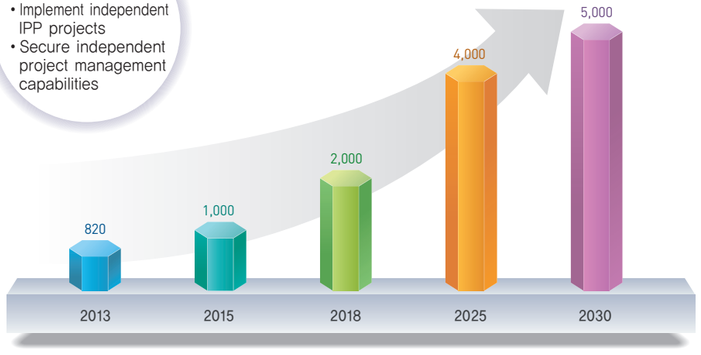
Overseas Business

:: Implementation Strategy

Short-term
- Develop small & medium IPP Greenfield
- Recruit project experts of individual sectors

Mid-term
- Develop large IPP Greenfield
- Nurture project experts in-house

Long-term
- Implement independent IPP projects
- Secure independent project management capabilities



Facility Capacity (MW)

:: Reinforcing Project Operation & Management Capabilities

EWP successfully completed the test operation of Nueva Ventanas coal-fired thermal power plant in Chile in 2008, and then it has been expanding its overseas service projects, such as O&M of a fluidized-bed plant in Cebu, the Philippines in 2009, US EWP RC Biomass and natural gas plant in 2010, and Jamaica JPS and Haiti E-power investment in 2011. From service businesses with dispatching operators at the beginning to the management of overseas power plants, EWP diversifies its business fields. This is because of EWP's world-class plant constructing and managing experience acquired from domestic power generating business, specialized fluidized-bed coal power plant and wind power plant experience, systematic and specialized manpower for overseas development and broad network for overseas projects. Also, along with such growth, EWP introduced the self-supporting system which can analyze individual profitability with overall benefits and costs of each overseas project to systematically manage and analyze overseas business.

On top of the previous business analysis system, which simply adds up the benefits and costs of overseas projects, this new system allows EWP to calculate overseas subsidiary profits, the overall profit of overseas business, including direct/indirect costs, as well as the overall expenses, and thus, to accurately analyze the profitability based on each business's real financial statement.

:: Overseas Power Generation Business in Operation

(As of Dec. 2013)

No	Project Name		Capacity(MW)	Investment	Collaboration
1	Jamaica Public Service (JPS)		637.32	Equity Investment(40%)	Marubeni, OUR
2	US EWP RC Project	Biomass Plant	58.2	M&A(100%)	-
3		Natural GasPlant	94		
4	E-Power Project in Haiti		30	Equity Investment(30%)	EDH
5	Guam Cabras #3,4 PMC Project		80	PMC	GPA

JPS HQ in Jamaica

Cabras Plant in Guam

:: Promoting Mutual Growth with Korean Enterprises Leveraging Global Partnership Schemes

In order to maintain public nature of its overseas business, EWP, as a public enterprise, is actively supporting exports of relevant domestic partners. At first, the win-win growth performance was merely 0.8 billion won from 1 overseas project in Guam in 2010 due to the simple purchase of domestic consumable products. However, with an effort to increase diversity, such as purchasing equipment, the export amount reached to 10.3 billion won, which was 13 times bigger than the one at the beginning. In addition, when EWP participates in overseas green field business, we go with domestic construction companies together, making the construction industry vibrant. Moreover, to become a global IPP and to fulfill its corporate social responsibility (CSR), EWP also supports the infrastructure of the vicinity of overseas business areas.

Continuous R&D

EWP has been endeavoring to lead advanced technologies and generating the company's future growth dynamics in those core technologies, which are highly demanding in mid- and long-term perspectives.

:: R&D Status

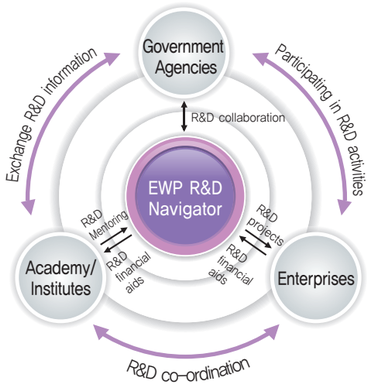
Along with the demand survey of technical development for the whole EWP employees, EWP established EWP industry-academic R&D Cluster for maximizing profit via the improvement of critical technology and preventing internal and external business environment changes. Also, in order to strengthen future technology competitiveness, core technologies to be secured in a long term perspective are selected(25 technologies in high/low cost power, improved credibility, and eco-friendliness sectors), and the mid- and long-term R&D schemes have been devised. On such basis, EWP developed Plant Operations and Maintenance Management system(POMMS), the world's first comprehensive power plant operation and maintenance working system, while doing best to secure advanced technologies that can address pending issues, through developing 8MW Energy Storage System* (ESS) and high value CO_2 reduction and conversion technologies.

❖ R&D Expenditures

Unit : billion KRW

Classification	2010	2011	2012	2013
R&D expenditures	23.9	25.2	28.0	19.7

❖ Academy-Industry-Research R&D Cluster



Roles of R&D Cluster

- Feeds technology development trending in the international energy industry
- Analyzes EWP's R&D
- Draws next generation challenges & tasks
- Offers advice and suggestions on power industry-related policies

* Energy Storage System : energy management system that is effectively increasing energy supply efficiency by supplying electricity at peak times, which has been generated for frequency adjustment and load balancing.

:: R&D Achievements

EWP has actively invested in the R&D not only to commercialize, but also secure original technology. A total of 418 research projects have been conducted, which later reduced maintenance and purchasing expenditures and thus is likely to increase the profits in the future.

Such expansion in the systematic and continuous investment in R&D was recognized. EWP won the best award at 'Korea Technology Innovation Award', and citation from the Korean government for the contribution to the development of power generation industry through the successful Hybrid denitrification system for the first time in Korea. Besides, EWP has secured a total of 170 intellectual assets. 75 out of them are meaningful in that they have been or will be transferred to SMBs and thus will promote a mutual growth with SMBs while generating additional values

❖ EWP's Intellectual Assets

Classification	Patent	Utility Model	International Patent	Trademark	Service Mark	Design	Total
Cases	126	19	3	12	9	1	170

Financial Performance

EWP has endeavored to achieve its long-term goal, '2030 Valuable Power Company'. EWP will pursue competitive edges through the innovation of business structures, create new growth momentum by business diversification and facilitate its management strategies execution by implementing advanced management systems.

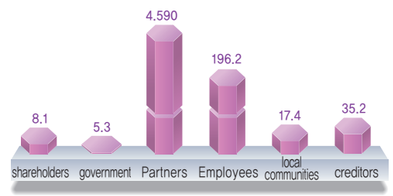
:: Management Indicators

EWP's sales volume of electricity in 2013 was 54.1 billion kWh, which was 1.6% decrease of the volume of the previous year, 54.9 billion kWh. The total revenue was 5,429.9 billion won, decreased by 9.8% from the previous year due largely to the depressed sales price. To cope with unfavorable external management environments, such as the increase of oil prices and exchange rates, EWP made efforts to overcome the difficulties. However, the profit was 102.7 billion won, dropped by 128.4 billion won from the previous year.

Indicators	2011	2012	2013
Sales (100 million won)	48,550	59,958	54,299
Operating Profit (100 million won)	1,919	2,311	1,027
Net Profit (100 million won)	929	1,675	333
Assets (100 million won)	58,675	61,203	74,891
Debts (100 million won)	24,665	26,511	40,600
Capital (100 million won)	34,010	34,692	34,291
Debt Ratio (%)	72.5	76.4	118.4
Dividends (100 million won)	694	822	81
Dividends per Share (won)	1,226	1,453	143

:: Distribution of Economic Returns

The profits created by continuous and stable supply of high-quality electricity are distributed in diverse ways to the stakeholders including employees, business partners, creditors, shareholders, local communities and the government.



(Unit : billion won)

:: Facility Investment

Total purchase from business partners in 2013 was amounting to 4,590 billion won which was allocated to fuel purchase (coal, heavy oil, LNG, etc.), maintenance and repair, purchase of materials, etc.

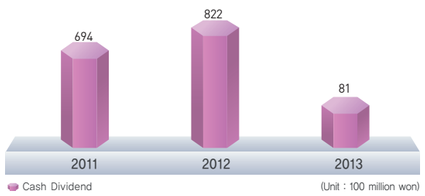
(Unit : billion won)

Salary & Benefits

In 2013, the personnel expenses for employees including salary, retiring allowance reserve and fringe benefits were amounting to 196.2 billion won in total. Total salary expenditure was 154.9 billion won, which was dropped by 22.0 billion won from the previous year, and the retiring allowance reserve increased by 2.1 billion won. Meanwhile, welfare expenditure was 21.9 billion won in total.

Compensation for Shareholders

For the economic performance made in fiscal year 2013, a resolution was made in the regular meeting of shareholders in March, 2014 to pay 8.1 billion won in dividends.

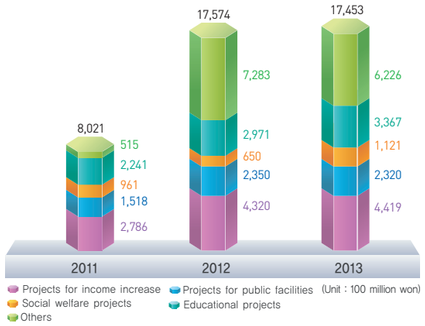


Tax

For the fiscal year 2013, total tax imposed on the net profit was 8.2 billion won. However, the actual payment included the corporate tax of 4.1 billion won, and the local tax of 1.2 billion won.

Social Contribution Expenditure

In 2013, 17.4 billion won was allocated for social contribution. Approximately 16.8 billion won out of the total expenditure was used for the local community revitalization program in accordance with the Act on Assistance to Electric Power Plants-Neighboring Areas. A fund of 600 million won which was raised through employee's donation and a matching grant was allocated for social contribution activities as well.



Appendix

Comment from External Reviewer

First of all, I warmly congratulate the publication of this report where we can found all sustainable management achievements EWP has made.

My first impression of this report was integrity. From the content and even the table of contents of this report, I was able to find all the indicators that the GRI Guidelines required, and relevant contents are clarified in substance. However, it would be better if emphasis can be put on the clarification of major agendas and issues so that readers can understand them easily and precisely.

Sustainability reports to be published after 31 December 2015 should be prepared in accordance with the G4 Guidelines, the fourth generation of GRI's sustainability reporting guidelines. As this EWP Sustainability Report was prepared in accordance with the G3 Guidelines, it seems that EWP will make necessary arrangements to change the reporting framework it is used to base on. According to the G4 Guidelines, the reporting requirements have been significantly changed. For example, evaluation on the sustainability management activities and relevant future plan shall be documented and reporting items shall be defined by aspects. So enterprises should make necessary arrangements to adhere to the new requirements.

Fresh that EWP has been expanding the scope of stakeholders and implementing communication activities which have also been tailored to the relevant purposes consisting of participation, cooperation, coexistence and win-win. However, it would be better if there are clarifications on how they are interconnected and communicated with each other as well as whether and how stakeholders have participated in those activities, beyond just having the channels categorized into online or offline.

The emission trading scheme and new environmental legislations such as act on chemical management and evaluation are expected to take effect next year. These new regulations are not only receiving greater attention from interested parties but also closely connected with the EWP's management practices. It is also recommended to figure out the impacts of new environment-relevant regulations and systems as well as the environmental management systems and relevant efforts EWP already has operated in place. It would be one of the enterprise-wide communications if those impacts are investigated and communicated throughout stakeholders.

Choi Gwang Rim
Business Institute for Sustainable Development

Implementation of UN Global Compact's 10 Principles

EWP became a signatory to the UN Global Compact in August 2006 as part of its mission to ensure transparent management and to fulfill its social responsibilities. The company discloses its compliance with the Global Compact through the following ten principles in four major areas.

Classification	Principles	Reference
Human Rights	Businesses should support and respect the protection of internationally proclaimed human rights; and	Collective Agreement Charter of Ethics Code of Conduct, Article 27
	Make sure that they are not complicit in human rights abuses	Corporate Philosophy Collective Agreement Code of Conduct, Article 27
Labor	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	Collective Agreement
	Businesses should eliminate all forms of forced and compulsory labor;	Collective Agreement
	Businesses should eliminate child labor; and	Collective Agreement
	Businesses should eliminate discrimination in respect to employment and occupation.	Collective Agreement Charter of Ethics Code of Conduct, Article 7
Environment	Businesses should support a precautionary approach to environmental challenges	Environmental Vision Environmental Policies ISO 14000 Certification Charter of Ethics
	Businesses should support a precautionary approach to environmental challenges	Environmental Policies Charter of Ethics
	Businesses should encourage the development and diffusion of environmentally friendly technology.	Environmental Vision Environmental Policies Charter of Ethics
Anti-Corruption	Businesses should work against corruption in all its forms, including extortion and bribery.	Code of Conduct, Chapter 3

THE GLOBAL COMPACT
WE SUPPORT

Awards & Associations

Major Awards in 2013

Award	Awarder	Remarks
2013 Transparent Management Award	Korea Accounting Information Association	Oct. 2013
2013 Regional Technology Expert Nurturing Organizations	Ministry of Trade, Industry and Energy Korea	Dec. 2013
Best Management & Best Manager at Korean Idea Management Award (Public enterprise sector)	Korea Suggestion System Association	Dec. 2013
Best Award at Korea New Growth Management Award (Green Technology sector)	Ministry of Trade, Industry and Energy Korea	Dec. 2013
Best Award at Korea Health & Environment Award (Energy Sector)	Ministry of Environment Korea	Dec. 2013
Best Award in 2013 Private Information Protection Award	Korean Council on the Protection of Personal Information	Feb. 2014
Prime Minister Citation at Shinmungo Award (Anti-corruption &civil rights champion sectors)	Anti-corruption & Civil Rights Commission Korea	Feb. 2014

Membership Associations

Organization	Purpose
Korean Association of Small Business Studies	To support policy making process and exchange academic knowledge
Korea Electric Association	To promote development of electric industry standards and of new codes
Korea Energy Foundation	To coordinate energy welfare programs and scholarship programs
World Energy Congress	To establish a network to exchange human and technology
Korean Association of Enterprise Architecture Studies	To collect latest information on enterprise architecture
Korea Accounting Information Association	To share information and ideas regarding K-IFRS, and to nurture accounting managers' competencies
Korea International Trade Association	To access trade-related information
Korea Electric Association (KEPIC)	To catch up with KEPIC development trends and to secure finance
Korean Standards Association	To introduce advanced quality control techniques and spread quality management mind throughout the company
Korea Suggestion System Association	To acquire information for the promotion of suggestions and small group activities in the company.
The Electric Utility Cost Group (EUCG)	To acquire overseas information on electricity.
Business Institute for Sustainable Development	To promote sustainable development of the company.
Koreas CCS Association	To exchange information on CO_2 capture/storage technology and business
Korea Smart Grid Association	To exchange information on smart grind, and stay informed of market status quo
UN Global Compact (UNGC)	To enhance the status as a global company.
Korea Green Business Association	To support GHG mentoring projects
Korean Society of Mechanical Engineers	To grasp the domestic and overseas trend of machinery industry by participating in academic meetings and lectures.
The Korean Institute of Electrical Engineers	To exchange the latest academic and technological information in related industries.
Korean Association of Power Generation Studies	To encourage power industry and discover themes for joint research tasks
Korea Project Management Association	To enhance the capabilities for project execution.
Korea Engineering & Consulting Association	To get certificates on engineering projects, and thus to promote new businesses (design and technical support, etc.)
Korea New & Renewable Energy Association	To exchange information in the area of new & renewable energy.
The Edison Electric Institute (EEI)	To acquire information on the electricity industry of the U.S. and establish cooperative relationship.
Association of the Electricity Supply Industry of East Asia and the Western Pacific (AESIEAP)	To acquire information for opening and extending overseas business

GRI Index

GRI Index		Description	Page	Note
Strategy and Analysis	1.1	Statement from the most senior decision-maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy.	2	
	1.2	Description of key areas of impact, risks, and opportunities	14	
Organizational Profile	2.1	Name of the organization	6	
	2.2	Primary brands, products, and/or services	6	
	2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	6	
	2.4	Location of the organization's headquarters	6	
	2.5	Number of countries where the organization operates, and the names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	7	
	2.6	Nature of ownership and legal forms	9	
	2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	6	
	2.8	Scale of the reporting organization	7	
	2.9	Significant changes during the reporting period regarding size, structure	9	
	2.10	Awards received in the reporting period	74	
Report Parameter	3.1	Reporting period (e.g., fiscal/calendar year) for information provided	1	
	3.2	Date of most recent previous report (if any)	1	
	3.3	Reporting cycle (annual, biennial, etc.)	1	
	3.4	Contact point for questions regarding the report or its contents.	1	
	3.5	Process for defining report content	1	
	3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers)	1	
	3.7	State any specific limitations on the scope or boundary of the report	1	
	3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	N/A	
	3.9	Data measurement techniques and the basis of calculations	1	
	3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	N/A	
	3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	1	
	3.12	GRI Content Index	75	
	3.13	Policy and current practice with regard to seeking external assurance for the report	72	
Governance, Commitments, and Engagement	4.1	Governance structure of the organization	9	
	4.2	Indicate whether the Chair of the highest governance body is also an executive officer	9	
	4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members	9	
	4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	14	
	4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	9, 10	
	4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	10	
	4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees	9	
	4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	11, 12	
	4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance	10	
	4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	10	
	4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	13	
	4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	74	

GRI Index		Description	Page	Note
Governance, Commitments, and Engagement	4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations	74	
	4.14	List of stakeholder groups engaged by the organization	14	
	4.15	Basis for identification and selection of stakeholders with whom to engage	14	
	4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	14	
	4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting	14	
Economic Performance Indicators	EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	69, 70	
	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	49, 50	
	EC3	Coverage of the organization's defined benefit plan obligations	N/A	
	EC4	Significant financial assistance received from government	N/A	
	EC5	Range of ratios of standard entry level wages by gender compared to local minimum wages at significant locations of operation	-	
	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	41	
	EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation	20, 43	
	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	41, 43	
	EC9	Understanding and describing significant indirect economic impact, including the extent of the impact	-	
Environmental Performance Indicators	EN1	Environmental Performance Indicators	52	
	EN2	Percentage of materials used that are recycled materials	53	
	EN3	Direct energy consumption by primary energy source	52	
	EN4	Indirect energy consumption by primary source	52	
	EN5	Energy saved due to conservation and efficiency improvements	50	
	EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives	50	
	EN7	Initiatives to reduce indirect energy consumption and completed reductions	53	
	EN8	Total water withdrawal by source	53	
	EN9	Water sources significantly affected by withdrawal of water	53	
	EN10	Percentage and total volume of water recycled and reused	53	
	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	N/A	
	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	57	
	EN13	Habitats protected or restored	N/A	
	EN14	Strategies, current actions, and future plans for managing the impact on biodiversity	57	
	EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	N/A	
	EN16	Total direct and indirect greenhouse gas emissions by weight	49	
	EN17	Other relevant indirect greenhouse gas emissions by weight	49	
	EN18	Initiatives to reduce greenhouse gas emissions and completed reductions	50	
	EN19	Emissions of ozone-depleting substances by weight	N/A	
	EN20	NO_x, SO_x, and other significant air emissions by type and weight	52, 53	
	EN21	Total water discharge by quality and destination	52, 53	
	EN22	Total weight of waste by type and disposal method	54	
	EN23	Total number and volume of significant spills	56	
Environmental Performance Indicators	EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	N/A	
	EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff	57	
	EN26	Initiatives to mitigate the environmental impact of products and services, and the extent of impact mitigation	52, 53	
	EN27	Percentage of products sold and their packaging materials that are reclaimed by category	N/A	
	EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations	55	
	EN29	The significant environmental impact of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	-	
	EN30	Total environmental protection expenditures and investments by type	41, 57	
Labor Practices and Decent Work Performance Indicators	LA1	Total workforce by employment type, employment contract, and region, broken down by gender	20	
	LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region	20	
	LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	22, 27	
	LA4	Percentage of employees covered by collective bargaining agreements	-	
	LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements	10	
	LA6	Percentage of total workforce represented in formal joint management worker health and safety committees that help monitor and advise on occupational health and safety programs	31	
	LA7	Rates of injury, occupational diseases, lost days, absenteeism, and total number of work-related fatalities, by region and by gender	30	
	LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	27	
	LA9	Health and safety topics covered in formal agreements with trade unions	30, 31	
	LA10	Average hours of training per year per employee by gender, and by employee category	25	
	LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing the conclusion of their careers	25	
	LA12	Percentage of employees receiving regular performance and career development reviews, by gender	23, 24	
	LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	9, 22	
	LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	22	
Human Rights Performance Indicators	HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening	-	
	HR2	Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening, and the subsequent actions taken	-	
	HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	23	
	HR4	Total number of incidents of discrimination and corrective actions taken	N/A	
	HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	N/A	
	HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	N/A	
	HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	N/A	
	HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	-	
	HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	N/A	
Society Performance Indicators	SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	38, 41	
	SO2	Percentage and total number of business units analyzed for risks related to corruption	20	
	SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	19	
	SO4	Actions taken in response to incidents of corruption	18, 19	
	SO5	Public policy positions and participation in public policy development and lobbying	34, 37	
	SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	-	
	SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	N/A	
	SO8	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations	N/A	

GRI Index		Description	Page	Note
Product Responsibility Performance Indicators	PR1	Life cycle stages in which the health and safety impact of products and services are assessed for improvement, and the percentage of significant products and services categories subject to such procedures	52	
	PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impact of products and services during their life cycle, by type of outcome	N/A	
	PR3	Type of product and service information required by procedure, and percentage of significant products and services subject to such information requirements	N/A	
	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcome	N/A	
	PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	15	
	PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communication, including advertising, promotion, and sponsorship	18	
	PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communication, including advertising, promotion, and sponsorship by type of outcome	N/A	
	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	N/A	
	PR9	Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services	N/A	
Electric Utilities	EU1	Installed capacity, broken down by primary energy source and by regulatory regime	7	
	EU2	Net energy output broken down by primary energy source and by regulatory regime	6	
	EU3	Number of residential, industrial, institutional and commercial customer accounts	N/A	
	EU4	Length of above and underground transmission and distribution lines by regulatory regime	N/A	
	EU5	Allocation of CO_2 emissions allowances or equivalent, broken down by carbon trading framework	N/A	
	EU6	Management approach to ensure short and long-term electricity availability and reliability	60, 61	
	EU7	Demand-side management programs including residential, commercial, institutional and industrial programs	60	
	EU8	Research and development activity and expenditures aimed at providing reliable electricity and promoting sustainable development	68	
	EU9	Provisions for decommissioning of nuclear power sites	N/A	
	EU10	Planned capacity versus projected electricity demand over the long term, broken down by energy source and regulatory regime	65	
	EU11	Average generation efficiency of thermal plants by energy source and regulatory regime	49	
	EU12	Transmission and distribution losses as a percentage of total energy	N/A	
	EU13	Biodiversity of offset habitats compared to the biodiversity of the affected areas	57	
	EU14	Processes to ensure the availability of a skilled workforce	23	
	EU15	Percentage of employees eligible to retire in the next five and ten years broken down by job category and by region	-	
	EU16	Policies and requirements regarding health and safety of employees, contractors' employees and subcontractors	30	
	EU17	Days worked by contractor and subcontractor employees involved in construction, operation and maintenance activities	-	
	EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	-	
	EU19	Stakeholder participation in the decision making process related to energy planning and infrastructure development	14	
	EU20	Approach to managing the impacts of displacement	39	
	EU21	Contingency planning measures, disaster/emergency management plans, disaster/emergency training programs, and recovery/restoration plans	13, 31	
	EU22	Number of people physically or economically displaced and compensation, broken down by type of project	N/A	
	EU23	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services	39	
	EU24	Practices to address language, cultural, literacy and disability related barriers to accessing and safely using electricity and customer support services	39	
	EU25	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases	N/A	
	EU26	Percentage of population un-served in licensed distribution or service areas	N/A	
	EU27	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime	N/A	
	EU28	Power outage frequency	60, 61	
	EU29	Average power outage duration	60, 61	
	EU30	Average plant availability factor by energy source and by regulatory regime	60	

Questionnaire for listening the opinions of readers

In this report, EWP has tried to disclose its sustainability management activities as openly as possible. To improve its contents and level of completeness, we would like to hear from you. Your opinions will be reflected in future reports.

1. What is your position?

① Investor/shareholder ② Employee of Business Partner ③ Local Resident ④ NGO
⑤ Employee of a Power Generating Company ⑥ Member of the Academic Community
⑦ Civil Servant ⑧ Employee of EWP ⑨ Other ( )

2. What is your overall evaluation of this report?

☐ Good ☐ Moderate ☐ Bad

3. How understandable is this report?

☐ Easy ☐ Moderate ☐ Difficult

4. What is your evaluation of the amount of information in this report?

☐ Too much ☐ Moderate ☐ Too little

5. Which section of this report did you find the most interesting?

☐ Sustainability of EWP ☐ Economy ☐ Environment ☐ Society

6. Which section of this report do you think needs improvement?

☐ Sustainability of EWP ☐ Economy ☐ Environment ☐ Society

7. Please feel free to make any comments on this report.

Thank you for your cooperation.
Please forward this form to +82-70-5000-1599 (Fax) or aram@ewp.co.kr (E-mail).

Documentation Process

This report is the 8th publication of EWP's sustainability report. The purpose of this report is to provide all stakeholders with a clear understanding on EWP's economic, social and environmental efforts and performances it has made as an ethical corporate.

This report has been prepared in accordance with the Global Reporting Initiative (GRI)'s G3 Guidelines.

To ensure the accuracy and credibility of the report, a task force team has been formed. All the content this report contains are strictly based upon data collected from departments with relevancies, and have been confirmed by EWP's management board for publication.

Global Reporting Initiative (GRI)

A guideline that has been created through a collaboration of Coalition of Environmentally Responsible Economies (CERES) and United Nations Environment Programme (UNEP) to support organizations prepare sustainability reporting documentations. The revised G3 version of the guideline was officially announced in October 2006.

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